

AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

JUNE 1, 1938



Brunnera Macrophylla

The New Interest—Herbs
Lightning Protection for Trees
Two Thousand Rock Plants
Plants for Wall Gardens

AMERICAN NURSERYMAN

Chief Exponent of the Nursery Trade

F. R. KILNER, Editor

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MORE COMPETITION?

Our federal government, if it passes the law restricting hours in the working week to forty-four or forty or any such number, will add to a form of competition nurserymen have already met in consequence of depression unemployment. More and more persons will seek a supplementary occupation to add to their income, and growing plants of one kind or another seems a favorite. It seems so easy to sow a couple of dollars' worth of seeds and let nature turn them into a profitable crop that the number of "back-yard florists" and "farm-corner nurserymen" multiplies whenever and wherever unemployment affords spare time.

In attempting to confine its circulation to bona fide members of the trade, the American Nurseryman has its share of the problem in the necessity of passing on subscription applications from persons who are in no trade directory, association list or state inspection list.

In this reputed land of the free, one should commend the efforts of persons to add to their income so as to drive toward the more abundant life of which we hear so much. And if the carpenter or clerk or factory mechanic has time on his hands after hours or on several days a week when he cannot be given employment at his regular occupation, why blame him for seeking to earn a couple of extra honest pennies?

But are they honest pennies if they come from stunted vegetable plants, weedy annuals, undernourished peren-

The Mirror of the Trade

nials and ill-grown shrubs? The public gets no bargain in buying such stock at the cheapest price, and buyers' disappointment is reflected in the purchases discouraged thereafter.

It is well that the A. A. N. blocked the farm forestry appropriation, else by it still more farmers and owners of "farmettes" would be planting trees and shrubs under present conditions.

Such competition is not easy to regulate so that the public will be protected. Many persons selling their plants locally or in small amounts escape the state nursery inspection laws. Other legislative efforts to protect the public have not been successful in this field.

Just as water seeps under or around a barrier it cannot flow through, so human nature cannot be stopped by legislation from working for gain. The evidence is all too plain that carpenters prevented by economics or law from constructing houses, mechanics from building engines and clerks from conducting commerce, are turning to one branch or another of horticulture to eke out a livelihood. The problem is increasing in importance, not diminishing.

BRUNNERA MACROPHYLLA.

Brunnera macrophylla has become so well known as Anchusa myosotidiflora that it will take a long time to force the corrected name into common commercial usage, but with amateur gardeners keeping themselves posted on correct nomenclature it behooves the trade to keep as nearly up-to-date as possible on such matters. Both Hortus and the Garden Dictionary assign the forget-me-not anchusa to the genus brunnera.

This attractive little spring-flowering plant can hardly be called new, but it is a long way from being common and there never appears to be a surplus of stock. Everyone is delighted with the shapely little plant when it is bearing its clusters of blue flowers like forget-me-nots, and as this occurs just when planting outdoors is at its height, it becomes a simple matter to sell plants, even small ones not yet in bloom.

The fact that this brunnera does not divide readily is a distinct advan-

tage to the nurseryman, as an amateur is not inclined to take the chance of losing his specimen just to give a friend a piece of it. Hence, there is little distribution of this perennial among home gardeners. Although propagation of this brunnera is not so simple as that of many herbaceous perennials, it can be reproduced quite readily from seeds and root cuttings. The best success with the latter usually comes from handling them in the late fall, in the same way that root cuttings of summer phloxes and Oriental poppies are treated.

Although seeds are comparatively expensive, they ordinarily give better returns than their high price might indicate. Fresh seeds sown in autumn in an outdoor frame and handled like those of any other hardy plant will give good germination and make salable plants by the following fall.

Brunnera macrophylla is effective in many situations. It is an almost perfect specimen for the rock garden, its shapely growth and clean heart-shaped leaves making it decorative even when out of flower. The blooms may reach up twelve to eighteen inches, but the clusters of basal leaves remain much closer to the ground. Nor does this plant make a nuisance of itself by wandering everywhere. It is equally admirable for the foreground of the perennial border. And as a ground cover in beds of tulips it is ideal, supplying a fine green background and disporting its lovely blue blooms just as the May-flowering tulips are at their best. The plant is tolerant of considerable shade, also, which adds to its uses. With all its advantages, this brunnera should be a good seller for a long time. It is hardy in virtually all parts of the country.

ORIENTAL flowering cherries which embody an attractive fragrance are the subject of compilation in the May 20 bulletin of popular information issued by the Arnold Arboretum, based chiefly on the descriptions in the late Dr. Wilson's book, "The Cherries of Japan," and Paul Russell's work, "The Oriental Flowering Cherry."

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The New Interest—Herbs

To Meet Popular Demand, Herbs May Be Used in Various Types of Gardens or Fill a Formal Design of Their Own—By Tom Pearson

For centuries herbs played an important part in every garden, even up to the time of our grandmothers' day. But since that time, for one reason or another, they have been sadly neglected and, in fact, many of them totally forgotten. Today we are in the midst of a great revival, practically a renaissance of the herb garden, and how long it will last time alone will tell. But one thing at least is sure, that it will leave a marked impression on the gardens of the future.

This matter of herbs is a broad one, for we have not only those of the garden, but those of the field, and included in the latter are many fit to adorn any garden. Then we have that large group of generally accepted garden flowers, such as primroses, violets, foxgloves, roses, monkshood, valerian, lilies of the valley and many others, which in these modern days we have failed to recognize as herbs, but whose uses and virtues were sung by all the old herbalists.

It might be well to define the term "herb," and generally speaking we may accept this definition, "An herb is a plant cherished for itself and for a use."

We have annual, biennial and perennial subjects in a complex and bewildering extent of varieties most difficult to classify. They can be roughly divided into four more or less overlapping groups—aromatic, culinary, medicinal and coloring. For example, one plant may be gifted with only one virtue, another with two, still another with three, and one variety, namely the pot marigold, *Calendula officinalis*, with all four.

This will give an idea of how broad

Requests for copies of the issue containing an article on herbs by Tom Pearson long since exhausted the supply, and inquiries of subscribers continue to indicate the spreading interest in these plants. Still pursuing that phase of horticulture, Tom Pearson gave an interesting broadcast on herbs May 22 over the Detroit News radio station WWJ. He reports several interesting herb gardens in that part of Michigan and two more now being constructed by well known landscape architects. His remarks here will afford a quick introduction to the subject for those nurserymen who hitherto have not interested themselves in herbs as a garden feature.

this subject of herbs really is, and it is broad in more senses than one, for we have herbs that will fit into any type of garden.

For the rock garden what is more fitting than the thymes, true saffron, calamint and *Anemone Pulsatilla*? In the woodland or naturalistic garden what thrives or looks better than hepatica, bloodroot, lungwort, ground ivy, myrrh or sweet woodruff?

No gray border would be complete without its santolina, wormwoods and woolly betony.

If you are interested in a white and green garden, you will find much suitable material such as bush basil, winter savory and the Madonna lily.

For the water, bog or pool garden there is a varied choice—water cress, sweet flag, marsh mallows and the numerous mints. Incidentally, a mint pool was a favorite feature of the monastic gardens of the Middle Ages.

The sweet-scented garden, an increasingly popular type, also draws many of its choicest varieties from these old favorites.

The Shakespeare garden—by the way, one is now under consideration for the city of Detroit—must have its full quota of herbs.

If one prefers to cultivate vegetables, some of the culinary herbs must be included—parsley for garnishing, chives to flavor cottage cheese, tarragon in vinegar, sage and thyme for stuffings, dill for pickles, mint for mint sauce, basil and chervil for fine omelets, or any other of the pot and salad herbs that add zest to a well prepared meal.

Herbs in general are the least exacting of all garden subjects; they ask little in the way of culture and give much in return. Some of the requirements are: (1) Most of the aromatics need full sunshine. (2) Any average garden soil, well drained, will suffice for most of them. (3) In the growing of herbs do not try to aid nature by mixing much manure in the soil; no doubt the plants will grow more vigorously, but their fragrance will be lost. (4) Water thoroughly, about twice a week during the growing season. (5) Cultivate frequently.

In the matter of seed sowing, this should be done when all danger of frost is past. Varieties of annuals such as sesame, dill, fennel, anise and coriander do not transplant easily; so it is much better to sow them where they are to grow, thinning out later to the proper distance apart. Others like sweet basil, borage and summer savory can be treated the same way, or can be sown in pans or flats and, after having made a good root growth, transplanted to their proper location.

Water the soil well before sowing, allowing the excess water to drain off.

Many of these seeds are quite fine and need little or no covering. A good rule to remember in this case is to sow seeds to the depth of the seed itself. After sowing, press the soil surface down with a flat board and then water again.

Many perennials can be readily grown from seeds, including sage, common thyme, winter savory and wormwood, but others, like southernwood (old man), lavender, santolina are best propagated from cuttings. In the case of lemon balm, bergamot, tansy, the various mints and pot marjoram, division of roots is a good method.

Regarding tarragon, *Artemisia Dracunculus*, the true one of vinegar fame, let me offer a word of advice: Do not purchase seeds of tarragon, or you will get a false variety, for true tarragon does not produce fertile seeds and can only be propagated from cuttings or division of roots.

Along what lines should an herb garden be laid out, formal or informal, is often asked. In every case I should answer, along strictly formal lines, both beds and paths, for most of these plants are so prim and proper they need such a setting, and if you use flagstone paths, you will find a wealth of material in the various creeping thymes and in that microscopic mint, *Mentha Requieni*. For a formal edging to the beds you will find germander (*teucrium*) a worth-while plant, which can be sheared back to six or eight inches; this, with its small dark, glossy green leaves, makes an excellent substitute for boxwood. In a garden of this type be careful in too free a use of ornaments; any one of these is good—a stone seat, a vase or a well. But perhaps the best and most appropriate of all would be just a plain sundial.

To refer specifically to a few of the old herbs, the first on my list would be the lavenders: Sweet lavender, *Lavandula officinalis*; spike lavender, *Lavandula Spica*; dwarf lavender, munstead. These are perennial; there are also some annual varieties. All the lavenders are shrubby plants with gray aromatic foliage and fragrant flowers of lavender purple or white. When lavender plants are well established, let them alone; they resent being moved.

Rosemary, *Rosmarinus officinalis*, is a tender perennial shrub; the narrow sea-green colored leaves have an aroma pleasing and distinct.

Rue, *Ruta graveolens*, is one of the

most attractive of the hardy perennials, making attractive compact bushes. The foliage is finely cut and blue green in color. Rue seeds and reseeds in any good garden soil, preferring one well limed. Next to wormwood, it is the bitterest herb known and was a purifying plant of the Middle Ages.

Marjoram is an important group and includes the annual variety, sweet marjoram, *Origanum Marjorana*, one of the choicest seasoning herbs, and two hardy perennials, pot marjoram, *Origanum Onites*, and wild marjoram, *Origanum vulgare*, both well worth while. Another outstanding member of this family is *Origanum Dictamnus*, the true dittany of ancient Crete. Dittany is an extremely tender perennial and, with its rounded woolly gray leaves and delicate purple flowers, makes a most attractive plant. But it is a plant only for the collector.

Most people think of the mints as a weedy and unruly lot of plants, and this is true. In any case we must have our spearmint for mint sauce with lamb, and peppermint and pennyroyal for teas and flavoring. But we have also two most pleasing subjects for the garden in apple mint, *Mentha rotundifolia*, and pineapple mint, *M. rotundifolia variegata*, the former an erect-growing type with soft greenish gray leaves and an aroma and flavor all its own. Pineapple mint is a much less vigorous variety, with delicate leaves of green and white, a truly fine addition to any garden.

FROST AND RAIN.

Friday, May 13, was unlucky for many gardeners because, in various portions of the east and middle west, they discovered that frost the night before had done considerable damage. Injury was chiefly confined to low areas or frost pockets. While tender plants were most affected, some foliage on the less hardy trees was either killed or injured. Grapevines and fruit trees likewise suffered. Much damage was done to peony buds, but as they were still tight, the extent will not be known until the flowers unfold. Nurserymen who market cut blooms of their peonies are getting fancy prices if they have any flowers to sell.

The suggestion is offered that nurserymen recommend to homeowners that valuable trees which have suf-

fered much loss of foliage might well be fed in order to stimulate growth and hasten recovery.

More pleasant to report are the continued cool weather and the abundance of rain which have made this an excellent spring season for planting and growing. Reports from the great plains area express rejoicing in the amount of rainfall there, accompanied by good business and prospects of a better year for growing plants than for several seasons.

FUNGUS ON CONIFERS.

Since the fungus *Sphaeropsis ellisii* commonly produces a tip blight of conifers, produces a collar and root rot disease on nursery-grown red and white pine and is capable of producing a collar rot on many other species of conifers, the organism is becoming considered as a major pest of such plants.

Nursery Disease Notes, for May, 1938, issued by the department of plant pathology of the New Jersey agricultural experiment station, describes tests at that station, the results from which indicated this fungus is capable of producing a collar rot on several other species of conifers besides those previously reported. All of the trees inoculated with the fungus showed infection of the bark and cambium one month later; the varieties were *Pinus montana Mughus*, *Pinus sylvestris*, *Pinus Strobus*, *Pinus resinosa*, *Pinus nigra austriaca*, *Pseudotsuga taxifolia*, *Picea excelsa* and *Picea pungens Kosteri*. Previous investigations showed that this fungus produced a root and collar disease on *Pinus resinosa*, and many 3 to 5-year-old trees in two Maryland nurseries were found to be dying from this disease.

Although the tip blight of conifers caused by the fungus is most common on *Pinus nigra austriaca*, it has been shown by artificial inoculation that *Pinus montana Mughus*, *Pinus sylvestris*, *Picea excelsa* and *Pseudotsuga taxifolia* are also susceptible.

FOR the first time larval parasites from Korea and Japan will be distributed this summer to peach growers of Connecticut to help subdue the Oriental fruit moth. The parasites are being reared at the state agricultural experiment station at New Haven to fill orders placed with the Connecticut Pomological Society.

Two Thousand Rock Plants

Huge Collection Occupying Nearly Four Acres, in Largest Bloom This Month, Affords Opportunity for Inspection of Rare Species—By Carol H. Woodward

Visitors to the New York Botanical Garden during the month of June will be able to see in bloom in the Thompson memorial rock garden a large percentage of the more than 2,200 species and varieties of plants that are established in it. Rock garden week there was designated as May 28 to June 1.

A number of the plants are familiar and virtually indispensable subjects, such as *Cerastium tomentosum*, *Arabis albida* (of which the double form has been found especially good), *gypsophila* of more than one kind, *veronica* in variety and innumerable different species of *viola*.

But many of the well known genera offer attractive hardy plants which are seldom elsewhere seen. From all corners of the earth the New York Botanical Garden has sought desirable new subjects for rock garden use. It acquires plants and seeds from near-by and distant nurseries. It exchanges seeds with institutions

all over the world, carefully grows the plants in the greenhouse or in coldframes, and does not transplant them to the rock garden until at least their decorative value has been proved.

A number of plants in the Thompson memorial rock garden have been brought in from their native haunts in the vicinity of New York. *Silene caroliniana*, sometimes known as *S. pennsylvanica*, for instance, makes a brilliant patch of pink in an appropriate spot. The common winter-green, partridge berry and trailing arbutus—the last carefully propagated, not just dug up and replanted—are given a place on an acid slope.

An increasing number of plants have been brought to this large rock garden by the New York Botanical Garden's own expeditions into the mountains of the southeast and the west. Among the plants of the southern Appalachians which have been introduced and which are now

flourishing there are *Sedum Nevii*, *Saxifraga tennesseensis*, *Iris verna*, *Marshallia obovata*, a white-flowered composite; *Chrysogonum virginianum*, a yellow-flowered composite; *Silene virginica*, brilliant red; *Scutellaria serrata*, *Hypericum Buckleii* and *Blephilia ciliata*.

Plants from the western expedition of 1936 are still being tested and are not yet for general public display.

When there is a large surplus stock of some good plant, it is distributed among members of the New York Botanical Garden, who arrange to have the plants reserved for them. A number of nurserymen pay the annual membership fee of \$10 or \$25, feeling that in so doing they are helping to support an institution which is exerting an influence toward making the public more garden-minded—an attitude which means increased business for them.

It is significant that, among the visitors at the garden, the number



View in Thompson Memorial Rock Garden in Bronx Park, New York City.

of people who have an intelligent and serious interest in horticulture is noticeably growing. Year by year the interest evinced in the newer plants becomes more intense, especially in the rock garden. Staff members at the garden are always glad to answer inquiries about either new or old plants, their habitat, their source or their culture.

Among the rare plants which may now be seen in the rock garden at the New York Botanical Garden are, besides the southern Appalachian species: *Linaria pallida*, which is profuse with delicate bloom against the gravelly surface of the moraine; *Anthyllis montana* Jacquinii, another moraine subject, with large rose-colored heads of flowers; *Bellium bellidioides*, like an English daisy of great daintiness; *Solidago algida*, a dwarf western goldenrod; *Allium roseum*, also from western North America; *Allium Schuberti*, whose large umbels of purplish flowers bear smaller clusters which extend from the center like shooting stars; *Stylophorum diphyllum*, the celandine poppy from the central states; *Schizocerckia Bornmuelleri*, a long-flowering white crucifer; several western species of *lewisia*, *Brodiaea* *ixioides*, *Achillea Clavennae* and numbers of others.

The Thompson memorial rock garden, which was established five years ago, was named in honor of a former president of the garden, Dr. W. Gilman Thompson. A recent count of every kind of plant that is now growing in the rock garden reveals that there are more than 2,200 species and varieties, in addition to the trees and shrubs which serve as a background. While of certain new ones there are only single specimens—some of them rare plants which may be seen in cultivation nowhere else—others occur in great masses which color the garden with their bloom. Many have established themselves successfully and are spreading year by year.

With the completion last autumn of construction of the bog garden at the southern end, the Thompson memorial rock garden now covers more than three and one-half acres. Located in the glade which lies east of the museum building, this garden offers varied sites for different types of plants. The wooded slope, down which a cascade tumbles over rocks,

contains many native species, some of which grew there naturally before the garden was made, but most of which have been especially grown for that bank.

Within the spray from the cascade are plants which enjoy constant moisture in the air as well as near their roots. Where the small stream runs along the floor of the glade, *trollius* blooms on the banks, and farther on is a carpet of the southern bluet, which is always found near running water. Beyond, where the bog garden has just been established, Japanese primulas on the shore are reflected rose-red in the water.

At the opposite end, a large area has been planted to varieties of heather, which with other ericaceous plants, demand a soil specially treated to provide an acid condition. Lime-loving subjects are segregated in another part of the garden. Alpine plants which thrive best when their roots can run through a cool crevice in a rock, such as *Ramonda pyrenaica* or *Phyteuma comosum*, are placed in the special situation they demand.

For plants which grow naturally in a gravelly soil with running water only a little way beneath the surface, the New York Botanical Garden has constructed a special moraine, through which water is constantly flowing. Here have been planted some of the most precious of rock garden plants—species which often will grow under no other conditions. The long-experienced rock gardener will undoubtedly find the plants of greatest interest to him in the moraine, while the beginner or mere observer will have more concern for the broad masses of bloom of the showier species.

SHERMAN SALES GARDENS.

In the month that has passed since the opening of the Sherman Nursery Gardens, the returns have been quite pleasing, according to H. J. Deems, vice-president of the Sherman Nursery Co., and so many nurserymen have expressed interest in providing facilities for retail sales on the grounds that the accompanying illustration of the building put up at Charles City, Ia., by this well known firm is presented.

The sales building, painted white, is colonial in character and has green-shuttered windows, a red chimney, a green roof and a stone-paved porch with seats on either side of the door. The building is set a sufficient distance from the highway to provide a crushed-rock driveway and to permit ample parking space. Evergreen foundation plantings have been made, the spacious lawn has been landscaped, and grass is now growing.

The interior is in keeping, the salesroom, 16x32 feet, having a knotty pine finish, exposed beams, marine lanterns, pine shelving and a generous fireplace. Across the small-paned front windows are glass plant shelves. Here cut flowers are sold at retail for the first time in the company's history, as well as potted house plants, pottery and seeds in packets and bulk. Accessories, such as lawn furniture and ornaments, insecticides, peat moss and spray materials, are offered. A covered passage connects the salesroom with a workroom in the rear.

Close at hand outdoors are frames of evergreens, from which small trees can be quickly transferred to purchasers' automobiles. A large area is devoted to fruit trees, shade trees, shrubs, etc., which have been heeled-in ready for delivery. A garden of perennials will be added.



Sales Building in Retail Display Gardens.

Plants for Wall Gardens

Fourth of a Series of Articles on the Better Subjects for Garden Feature Now Attracting Public Interest — By C. W. Wood

I cannot imagine a dry, sunny wall without some golden drops (they are not always golden, though), yet few are seen in this country. They are accommodating, asking for little moisture and growing space if given their desire for full sun and good drainage. Their ease of culture is not their only recommendation, however, for they have beauty of flower and the blooming period of many of the species falls in July, when color is needed.

The only one that seems at all well known on this side of the Atlantic is *Onosma stellulatum*. The species appears to be highly variable and, as most of our material has been grown from seeds, it is natural that we find many different plants traveling under that label. There is not much to be done about it, so far as I can see, until some botanist straightens us out in our nomenclature. In the meantime it is well to shop around until one finds a really good form and then propagate it from cuttings. That is an easy job, too, the plant making many new growths in summer, which root readily if rubbed off with a heel and placed in sand. The best form of *stellulatum* appears to be variety *tauricum* (some authorities are for giving it specific rank), a foot high or taller, clothed in gray leaves, which adorns itself with a shower of bright golden drops for a long time in summer, usually starting in June and continuing until August. This is a real treasure when the correct plant is being dealt with. Other species which may be had without too much searching are *albo-roseum*, *echioides* and *decipiens*. The first of these is a low bush, usually not more than six inches high, though it may reach nine inches in good soil, with silvery leaves and one-sided racemes of pendant pear-shaped flowers, usually white, flushed rose, at first and fading pinkish. It is a lovely plant, blooming in northern Michigan during part of June and early July. The second, *echioides*, seems to be a much misunderstood plant. It often appears in gardens under label of *tauricum*, and I have it as *decipiens*. It is not strikingly beautiful, the flowers being so pale (yellowish) they are not at all conspicuous, but the silvery leaves re-

deem it as a wall ornament. It gets up to nine feet in height and blooms in June. In checking up during the last year on a plant which I have grown for some time as *decipiens*, I find that my material is incorrect and that the true plant is a little 5-inch to 6-inch plant, growing in hairy tufts, over which are displayed large, pure white flowers in June. No doubt, being as easily grown as the others, it would be a welcome addition to our list of wall plants. I mention it now, not only to correct any misunderstanding I may have caused by previous mention of the incorrect plant, but also to point out a plant that we ought to have in this country.

Papaver.

An entire issue could be used to extol the virtues and beauties of the alpine poppy, but our enthusiasm must be curbed to a mere recital of a few essential facts. First of all, *Papaver alpinum*, as used by Linnaeus, does not include all the diverse material moderns call alpine poppies. Linnaeus' plant is variable, as to height, though usually taller (up to six or eight inches) than the other forms from the high Alps and Pyrenees, and has fragrant white flowers. The other forms, which have been given names such as *aurantiacum*, *Burseri*, *pyrenaicum*, *rhæticum* and *Sendtneri*, bring a host of colors ranging from the white of *Burseri* through the pale yellow of *aurantiacum* to the orange of *rhæticum*. All of this is of little value to the nurseryman except to point out the fact that we are not using the right label when we call all low-growing poppies *Papaver alpinum*. If they are not white-flowered and do not possess the other characters which Linnaeus gave *alpinum* when he described the plant, they are probably hybrids and should be so named.

With that out of the way, we are ready to consider one of the best scree and wall plants it has ever been my good fortune to grow. As available in seeds, the flower color covers a wide range, including about everything in ordinary colors except blue and its affinities. This is one plant that is easily spoiled by overfeeding,

becoming bloated on a rich diet and producing luxuriant foliage at the expense of flowers. On the other hand, give it a meager soil, made up mostly of gravel, and it will stay within its normal stature of six inches or less and give some bloom from May until frost. Like most poppies, it resents disturbance and should be handled while young or in a dormant stage. If plants are wanted for summer sales, it may be found advantageous to pot up early-sown seedlings, using 3-inch rose pots, but it should be remembered that these poppies do not do well in pots for any length of time.

Paronychia.

The whitlowworts are not much as to flowers, but all species that I have grown are furnished with showy, bright stipules, which are more pleasing than a flower of any other color would be. Add to that the fact that they are among the easiest of plants for dry, sunny situations and further that they are low, creeping things and we have a group of really good wall ornaments. There are about fifty species, mostly confined to the Mediterranean region, but a few are native in this country. And I have found none more attractive than our native *Paronychia argyrocoma*, a 3-inch to 6-inch plant with all the pleasing characteristics of the genus. They are perhaps best grown from seeds, though division of old clumps furnishes a rapid means of increase.

Pelargonium.

No pelargonium of my acquaintance—they are the geraniums of florists—is hardy in northern Michigan, but one of the few species that have wandered away from the ancestral home in southern Africa, *P. Endlicherianum*, of Asia Minor, should be hardy in a south wall from the Ohio river southward. It can be kept over winter here by removing it to a protected frame, but its rather straggly growth to a foot or more and its umbels of rose-colored flowers during July and August should make it a worthy wall plant where it is hardy. It is perhaps best grown from cuttings after a stock is established. It is unlike the common geraniums of

florists, being herbaceous, and consequently cuttings have to be taken in late spring.

Phlox.

If western phloxes were easier to grow in the east, one could fill a volume with their praises. If others have as much trouble with them under garden conditions as I have, it will require much more experimenting before we are ready to offer them for general culture. Most of them do well under the controlled conditions of frame culture, but soon begin to languish after being exposed to the heat, dry air and other untoward factors of garden life. All I can say is that the genus as it grows in western mountains and plains has so much beauty it is staggering. And after that is said, one turns to the east and consoles himself with the beauty and amiability of the moss phlox, *P. subulata*. The latter, especially in the varieties of restrained growth, is one of the most useful of all garden plants and a splendid wall ornament. The old named varieties are too well known to need extended mention, though I should like to enter a protest against their continued use to the exclusion of better modern varieties. The following kinds should pep up your moss phlox sales: Brightness, bright pink, large flowers; Emerald Cushion, compact cushion and deep pink flowers; Leuchtstern, a conservative grower and the loveliest salmon pink color in the entire list; Maischnee, pure white, yellowish at the center, gray leaves; Rochester, a rapid grower with showy rose flowers in spring and usually in fall, and one of the best landscape kinds where quick results combined with good color are desired; Ronsdorfer Schoene (Ronsdorf Beauty), one of the loveliest to date, with large salmon flowers over compact clumps; Samson, large, round flowers of a particularly pleasing shade of rose; Schneewittchen, according to most observers pure white, but to me carrying a suggestion of gray which gives it a distinctiveness not possessed by any other white. The flowers of the last-named are small, though so freely produced as completely to hide the foliage, and it is one of the best selling moss phloxes I have ever grown.

Phyteuma.

Right now I am in the midst of high adventure among the horned rampions, having contracted the col-

lecting fever three or four years ago. Of the twenty-some kinds which have flowered here, none has been unworthy of garden space, though few are really spectacular. I favor them, however, for the pleasing blues which they add to the June and July landscape, and as they are of easy culture, I can enjoy them without a lot of fuss and bother. The only one that has given much trouble is *Phyteuma comosum*, and I am not sure that its queer beauty is worth the trouble it takes to keep the plant thriving. I can arrange the rock fissure—limestone it seems to require—which it is said to demand, but apparently fail in supplying it the right amount of moisture, for it thrives not. The only other one that has shown any signs of sulkiness under garden conditions here has been *P. hemisphaericum*, a small charmer from the Alps. It has so far done poorly in the garden, apparently requiring more moisture than our summers afford, but it reacts splendidly to the conditions in an acid bed in a frame where it gets plenty of moisture. Its tousled heads of pale blue bottles on 3-inch stems in May and early June over tufts of grass-like foliage are worth the little effort needed to make it comfortable.

Of the easy kinds, *P. orbiculare* is especially valuable because of its mid-season flower period extending well into July, giving that hot month a dash of cooling blue. The floras give the color as purple, but, although it varies somewhat in different lots of seeds, all that I have grown have been in pleasing shades of blue. A good companion for a sunny wall has turned up in *P. lobelioides*, though in this case the flowers are lavender blue stars strung loosely on 15-inch arching stems. Both plants are easy and permanent in full sun or light shade in well drained soil. In fact, all *phyteumas* that I have grown except the first two in the foregoing notes are easy enough to put in the hands of amateurs, and they are sufficiently unusual to attract attention. They are propagated from seeds.

TO FILL the vacancy made by the promotion of P. J. Parrott to the position of director of the New York state agricultural experiment station last January, Dr. Hugh Glasgow has been appointed chief of the division of entomology. He has been with the station since 1914.

ANEMONE PATENS.

Low meadows in the northern great plains were starred in April with the first native flower of spring, *Anemone patens*, the prairie anemone, wild patens, American Pasque flower or, as it is incorrectly termed, the prairie crocus.

It is the state flower of South Dakota and the floral emblem of Manitoba province. It is typically a herbaceous perennial of prairie terrain. It thrives in moist, low grassy locations. The experimental station at Morden, Manitoba, is within its range, though without plant representatives, and W. R. Leslie wrote interestingly about it in a recent station newsletter.

The dainty blue to pale blue flowers appear before the root leaves are formed. Even when it opens its golden centers before the near-by snowdrifts have fully disappeared, he remarks, it exhibits a cozy appearance with its dense, fine, woolly hair covering on sepals and flower stalk. The latter may be from three to nine inches tall and will elongate several inches after flowering. This peduncle carries an involucle of deeply cleft sessile leaves remote from the flower. Later root leaves appear, and they likewise are much divided into long linear acute lobes, but they are petioled or stalked. The styles are plumose, and as the seed develops the plume may become two inches long.

This floral harbinger of prairie spring is best transplanted as root divisions in September, or grown from stored seeds sown shallow in clean soil in April.

As for names, there is much to be said. There is a European-Siberian *Anemone patens*. Gray terms the native *Anemone patens* var. *Nuttalliana*. Britton distinguishes it from nonplumose-styled anemones as *Pulsatilla hirsutissima*. *Anemone* is usually considered as derived from the Greek word for wind. *Patens* means spreading. Hence, it is the spreading wind flower. *Pasque* refers to pass over or the Feast of the Passover or Easter. The anemone belongs to the buttercup family and is far removed from the crocus, which belongs to the iris family, has grasslike leaves and flower parts in threes, and forms distinct bulbs. *Anemone patens* has fibrous roots.

Lightning Protection for Trees

*Types of Lightning Damage to Trees and How It May Be Prevented,
Told Ohio Short Course—By A. Robert Thompson, National Park Service*

While the protection of trees from lightning is not a strictly new idea, it has received considerable impetus in recent years through the publication of government bulletins, the presentation of scientific papers at shade tree conferences and the printing of popular articles in magazines and trade papers.

I should like to discuss briefly the nature of lightning, the types of lightning damage to trees and how this damage may be prevented, and then tell you something of the lightning-struck tree survey being conducted by the National Shade Tree Conference.

Nature of Lightning.

What is lightning? As commonly used, this term is applied to certain types of heavy electrical discharges in the atmosphere which may take place from one cloud to another, from cloud to earth, or from earth to cloud. The method by which sufficient potentials are built up to result in lightning is an interesting phase of electrical phenomena.

We know that electricity of opposite polarity (positive and negative) is mutually attractive, and we know further that to cause a lightning discharge between a cloud and the earth each must be charged with electricity of opposite polarity. Experiments have shown that thunderclouds are bipolar in nature, the upper part of the cloud usually being positive and the lower part negative. The earth normally carries a negative charge, but the overhead passage of the cloud usually induces a positive charge beneath it.

The formation of these charges is speculative to some extent, but various observations and experiments indicate that the origin of the electrical separation of thunderstorms is largely due to the action of vertical currents on precipitation. The magnitude of the electric charges produced by the breaking of a drop of water has been shown to be sufficient to account for the electrical effects observed in the most violent thunderstorms.

The atmosphere surrounding the

earth normally acts as a retardant to the passage of the electricity, but when a sufficient potential gradient is built up the atmosphere breaks down and allows a discharge between clouds, or between clouds and earth, and we have a phenomenon generally recognized as lightning. The path of the lightning stroke is presumably determined by the intensity of the electrical stress in the air; hence, a high structure or tree will often receive the stroke, since the electrical stress is higher at its surface than in other parts of the air at the same height above the ground.

Types of Lightning Damage.

Lightning damage to trees falls into three general categories. The first and most apparent is the physical shattering of an entire tree, or some part of it. The second is more difficult to ascertain, since it concerns internal or hidden injuries that may not be apparent immediately or without thorough examination. The third type of damage may affect a tree by killing all or part of the root system with no visible symptoms above the ground except the sudden death of the tree.

Under the first heading, lightning may affect a tree in one or more of the following ways:

1. Completely shatter the woody structure.
2. Strip all bark or strips of bark.
3. Shave off the loose outer flakes of the bark.
4. Shatter the base and fell the otherwise uninjured tree.
5. Shatter and set fire to the woody structure.
6. Strip bark in disconnected strips along the limbs or trunk.
7. Girdle and kill by tearing out spiral bark strips.

The second general phase of lightning damage, as mentioned previously, consists of unseen or less visible injury to the internal structure of the tree as in the cambium and sapwood. Such injury sometimes causes the leaves on one side of the tree, a single limb or the terminal growth to brown and die with no other external symptoms. Dodge has

attributed many of such injuries to earth to cloud discharges and possibly to "resurges" resulting from a direct stroke elsewhere. Occasionally a tree will show no visible symptoms of being struck and some years later may develop a small ridge on the bark which follows the grain of the wood. Careful examination of the cross section of the cambium across such a ridge might reveal a small pinhole extending under the ridge. We have all noted spiral ridges on trees which are diagnosed as lightning damage because they differ materially from frost cracks and have no other probable cause.

The third type, or damage to root systems, is not so common. When this type of injury occurs alone, it is extremely hard to diagnose accurately, since the evidence is hidden in the ground. The discharge may be so severe that the tree or some portion of it dies because the food and water supply was cut off when all or part of the root system was killed. The extent of this damage often may be ascertained by a careful examination of the fibrous roots. If a large portion of these has been injured and discolored, the tree will probably die.

Factors Influencing Effects.

The varying effects of lightning upon trees are thought to be explainable partially by the variations in voltage of the discharges. A bolt of low voltage is apt to show little or no visible evidence of its passage, while a discharge of high voltage may cause extensive and often irreparable damage. This destruction may be laid to the resistance of the woody structure to the passage of the electricity. The resistance raises the sap to such a high temperature that steam is produced, which exerts a high pressure on the cellular structure and rips and tears the wood and bark.

Another factor which may vary the effect of lightning is the moisture content of the tree and its surfaces. It is believed that the cambium and sapwood normally offer less resistance to lightning than the heartwood,

due to the greater amounts of moisture present in these tissues. Cases have been observed where damage has been slight because of a film of rain on the tree. In other cases, where the rain has not thoroughly wet the trunk and limbs, the lightning followed the wet surfaces and then jumped to the cambium and sapwood as the course of least resistance and caused great damage to the tree.

The starch and fatty content of trees of different species may be considered a factor in lightning injury. The starchy trees (oak, poplar, maple, ash, elm) are good conductors, while oily trees (beech, walnut, birch) are poor conductors. This may partially explain the supposed greater susceptibility of the former group to lightning injury.

Protection of Trees.

Can trees actually be immunized from lightning? The answer is positively yes! Answers to questionnaires received in 1935 from over 100 commercial arborists and others interested in lightning protection indicate that something over 4,000 trees have been given this attention in the last twenty years. That these systems have given approximately 100 per cent protection is evidenced by statements indicating that none of the correctly rodded trees has been reported injured by lightning.

Although other theories have been advanced, the "Code for Protection Against Lightning," states: "The sole purpose of lightning rods . . . is to protect . . . by conducting away the sudden stroke when it occurs, there being no evidence or good reason for believing that any form of protection can prevent a stroke."

It is recognized that there are experimental data to demonstrate the continuous discharging action of air terminals, but Prof. John Zeleny has pointed out that this discharge is in such small quantities as to have little if any real effect on lightning discharge.

A lightning protection system protects not only the tree itself, but gives supplementary protection for buildings and trees overhung by the protected tree and to persons or livestock taking refuge beneath it. The radius of the protection influence has been the object of recent studies.

Peek was the exponent of the theory of the so-called cone of pro-

tection, which he determined under laboratory conditions exists around each vertical lightning conductor. His experiments showed that a vertical conductor will generally divert to itself all direct hits which might otherwise fall within a cone-shaped space, of which the apex is the top of the conductor and the base a circle, of which the radius is two to four times the height of the conductor. It has been found in field practice that this cone of protection is violated in possibly five per cent of cases, however, and in recent years two such violations have come to the attention of the speaker. The cone of protection is an important factor in rod installations.

Principles of Tree Protection.

Reduced to fundamentals, lightning protection for a tree consists of a conductor extending from the treetop to an electrical ground in such a manner that if the system is struck the discharge will pass harmlessly into the earth without injury to the tree. This is not the whole story, however, and before installing lightning protection in a tree the following principles should be understood and considered.

1. Materials.—Copper, aluminum and iron are satisfactory materials for lightning protection systems, but since copper is relatively free from corrosion, cheap and an excellent conductor, its use is generally recommended over the other metals. It should be observed, however, that regardless of the material selected all parts of the system should be made of the same metal.

2. Air terminals.—The tree should be carefully examined and the point or points most likely to be struck selected for air terminal locations. It is axiomatic that such points should be at the highest leader or leaders of the tree. It is unnecessary to place air terminals on lateral branches where such points fall within the cone of protection, but if parts of the tree extend beyond the cone of protection they should be equipped with air terminals.

3. Conductors.—Flexible cable is to be preferred for conductors on trees to solid bars or tubular materials. An average-size tree requires only one main down conductor, but a large tree is better protected by the use of two down conductors on opposite sides of the tree, interconnected

near the top. Conductors should follow the most direct path to the ground in order to offer the least possible resistance to the passage of the discharge. Where bends are unavoidable they should have a radius of at least eight inches and no change of direction greater than ninety degrees. Branch conductors to lateral air terminals should be equivalent in diameter and material to the main conductor cable, which should weigh not less than 187.5 pounds per thousand feet. The size of any wire in the cable should not be less than No. 17 A.W.G. Miniature cable is unsatisfactory for this purpose.

4. Side flashes.—It is good practice to use copper or copper-covered bracing materials in trees which are also protected from lightning, but if the tree has been braced mechanically with any kind of cable or rods, all such braces should be connected to the lightning protection system to prevent side flashes. Miniature cable, equivalent in strength and conducting cross-sectional area to a No. 6 A.W.G. copper wire, may be used for this purpose.

5. Joints.—Joints should be as few in number as possible, mechanically strong and of good electrical continuity. Wrapped cable joints, if six to twelve times as long as the diameter of the cable, are as satisfactory as clamp sleeve joints. Soldering of joints will strengthen and also assist the electrical continuity, although this is seldom necessary. It should be noted that the common liquid or heatless solders sold in tubes are not electrical solders and should not be used.

6. Electrolysis.—Metals which occupy different positions in the electromotive series should not be joined if it can be avoided as the electrolytic or galvanic action may injure the joints. But if unavoidable, the galvanic action may be minimized by soldering or painting the joint with a waterproof metal preservative paint.

7. Attachments.—Copper lightning cable may be attached to the tree with copper nails. The old belief that copper nails will kill a tree has no basis in fact, and the use of materials other than copper for attachment of conductors should never be based on this exploded fallacy. Galvanized nails for attachment of copper conductor cable are dangerous

[Continued on page 16.]

Prepare for A. A. N. Convention

*Outstanding Entertainment Features Announced for Detroit Gathering
Next Month and Prominent Speakers Scheduled for Business Sessions*

Further progress in the preparation of the entertainment program for the convention of the American Association of Nurserymen, July 19 to 21, at Detroit, Mich., was made in a meeting of the local committee last week.

The boat trip on the Sunday preceding the convention is expected to bring visitors to Detroit early, because the ride on the river and lake will give everybody an opportunity to renew or make acquaintances before the business sessions set in. Provision will be made for holding on the boat the meetings of small allied organizations, so that they will not have to be crowded in between convention sessions.

The boat will be available early in the morning, in case any committees wish to hold meetings before it leaves the dock. The dining room will be open, and anyone can secure breakfast or luncheon on the boat before it departs. Arrangements have been made for busses to return the visitors to the hotel after the boat ride.

Monday will be the day for the trip to Greenfield Village, which was described at length in the preceding issue of the American Nurseryman. The historic interest of this exhibit excites the admiration of every visitor, and the opportunity is one not to be missed.

Mrs. Benjamin J. Greening is chairman of the committee arranging for the women's entertainment, and she has appointed to serve with her Mrs.

Wilbur Ilgenfritz, Mrs. Bert Manahan and Mrs. Harry Malter. They have arranged a theater party for Tuesday evening, July 19, and a luncheon at noon of the same day, when the Women's Auxiliary will hold its business meeting. Plans are being made for one or two interesting speakers to address the meeting.

Already at A. A. N. headquarters in Washington, D. C., Richard P. White, executive secretary, is making preparations for the business program. Three speakers already definitely billed to appear have messages nurserymen from every section will wish to hear.

Earl C. Michener, Adrian, Mich., congressman from the second district, will address the convention on "Government and Business." Mr. Michener spoke on the floor of the House of Representatives, along with certain other nurserymen's friends, in opposition to the Norris-Doxey act when it was up before that body. He was helpful in the recent fight against the appropriation for that act. After graduating from the University of Michigan and from the law school of Columbia University, Mr. Michener was admitted to the bar in 1903, served throughout the Spanish-American war and has been congressman from the second district of Michigan from the sixty-sixth to the seventy-fifth sessions of Congress with one exception. He is a Republican and has acted as a real friend to nurserymen in the House of Representatives. The

convention is assured of hearing a good speech when he takes the platform.

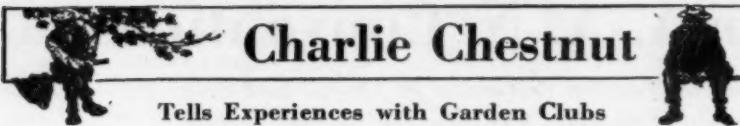
W. H. Brokaw, extension director in the college of agriculture of the University of Nebraska, will address the convention on "Nebraska's Coöperative Farm Forestry Program." Mr. Brokaw is serving on a committee of land grant college extension directors relating to federal and state coöperation in many matters, one of which is the farm forestry problem. In Nebraska an arrangement has been worked out under the Clarke-McNary law whereby tremendous quantities of reforestation stock have been bought under a coöperative agreement with the state nurserymen's association. Mr. Brokaw is to present this plan of true coöperative farm forestry in the hope that it will stimulate and give ideas to A. A. N. members in other states to proceed along the same lines.

Evert Kincaid, zone land planting consultant of the Federal Housing Administration, will discuss the subject, "The Federal Housing Administration and the Nurseryman." Mr. Kincaid is a landscape architect by profession and is in charge of that zone of federal housing activity including Detroit, although he is located in Washington. He will outline the activity of the building program of the government housing philosophy as it regards landscaping and will give the members advice and direction as to how they can utilize this program to their advantage.



Courtesy National Seedman

Detroit Skyline as Seen from the Canadian Shore of the Detroit River.



Charlie Chestnut

Tells Experiences with Garden Clubs

One day last fall Emil and me was sittin in the office talkin. Emil was givin me his ideas about what was wrong with nurserymen. He was wavin his arms like he does and I was not payin attention to him as I have heard him talk so much before. "For one thing", he says, "we should cultivate the garden clubs more." "There is a group of wimmen which is interested in gardening", he says, "and we should go to work and send them all a postal card this spring and tell them they should come to the nursery and buy some of our stuff. It aint no wonder that business is so bad when we dont do nothin", says Emil. "Charlie", he says, "I want you to go to work on it. Most of the other nurserymen is too dumb to take advantage of this opportunity, so we might as well be the ones to cash in on this big market. I'll bet there is a couple of hunnert clubs right under our nose, so to say."

The time come later when we had em under our nose, under foot and in our hair. It was once when Emil had only hisself to blame, as I told him whenever he used to cuss about it later that it was his own idea and for once he could not blame me for the way it all turned out.

When I suggested to Emil that I was going to go to work and write it up for the paper, he says, "Do you want to make me the laughing stock of all the nurserymen?" Finally I convinced him that we owed it to the nurserymen to tell the whole story so that they would know what gettin mixed up with garden clubs leads to in the end. So as Emil and I have washed our hands and face of the whole thing I am going to let bygones be bygones and tell the real lowdown on garden clubs.

The first thing I done was to get a list of all the garden clubs which was within a stones throw of Riverbend so to speak. I found there was 60 clubs. I sent them all a postal card telling about our nursery and the different stuff we had to sell. I added that we aimed to cooperate with garden clubs and was willin to help in different ways. That was the fatal mistake as I found out right soon.

In a few days a whole car full of

ladies drove into the nursery. Emil and I was sittin in the office gettin up our spring price list. One lady come in and says, "I am Mrs. Blup from the Petunia Chapter of the Lake Park Garden Club. We got your postal card", she says, "and the ladies all thot it would be nice for you to come and give a talk before our January meeting. We are studying gardens of different nations and our January meeting is Garden of Russia, which we would like to have you tell about to the different members." Emil says he wasnt up on the gardens in Russia but he would look it up and give the matter a little thot. Mrs. Blup says she would have to know right away because this was a important meeting and they would have at least 40 members out and furthermore the members was all big buyers of different stuff and probably we would be the ones to sell them nursery stuff if we would give the talk. Emil played a mean trick on me when he told Mrs. Blup that I was in charge of the garden talk department and as he had to go down to the bank they could take it up with me. The deal wound up that I was to come and make the talk.

"Then", she says, "I want you to meet the ladies out in the car." So I went out and was introduced to all. There was seven in the car. They wanted to know where there was a good place to get a light lunch in Riverbend. I did a little rapid figgerin and I could see that here was a chance to get a good standin with the Petunia chapter. I knew that a peanut butter and lettuce sandwich and a cup of tea down at the tea room was 20c each, times 7 was only \$1.40 and I didn't think Emil would object to a expense account of \$1.40, so I says, "I will take you all down to the tea room as guests of the nursery." They were all pleased and invited me to ride down in there car. They laughed when I had to sit in Mrs. Blups lap and they kept asking her what would Mr. Blup think if he could see her now. I was a little embarrassed and was glad when we got to the tea room.

We all went in and as we were going in one of the ladies said, "My, but the air out here in the country always gives me an appetite, I don't know

when I have been so hungry." One of the other ladies said, "It seems ages since I had breakfast and I think I will break my diet and get something substantial." I begin to suspicion that my idea was not so good. We all sat down to a long table and the girl handed around some cards with a list of different stuff on which they had that day. My heart missed a beat when I seen at the top, "Special today, Tenderloin Steak Dinner \$1.50". Mrs. Blup says, "I dont know about the rest of your girls, but I am going to have the steak dinner." Before I could get in a word they all said "I'll take the same." and I could see \$12.00 plus tax gone right there. However I learned one thing. Never take it serious when a woman talks about a light lunch.

As we was sitting there waiting for the stake to cook I seen some of the ladies was reading on the other side of the menu where it said "Cocktails". Mrs. Blup said, "Look here, girls, here is Planters Punch. Remember I told you Will and I had Planters Punch in New Orleans one time and I have never had a chance to get one since. I am going to try one while we are waiting." All the other ladies says, "I'll take the same." I glanced at the card and I seen the price was 50c so I could see another \$4. Here I excused myself and called Harry the prop. off to one side. I told Harry I didnt have \$16.00 plus the tax with me but I would bring it down when I went home from work that night. I had been ownin Harry a little balance of \$3 for a few months and he wasnt any too pleased about it, so I told him to charge it to Emil. This was O.K. with Harry and I went back to the table and the ladies were certainly showing the effect of the Planters Punch. One old lady who was hard of hearing, Mrs. Blup told me was president of the Temperance Leage and she thought Planters Punch was just a lovely drink and proved that a person did not have to have alcohol in a drink. In fact she said rather coyly that she would like another one, but fortunately just then they started bringing in the food.

Emil wasnt at all pleased about the expense account. "This one dont matter so much", he said, "but mark my word, you will have all 60 of them garden clubs dropping here at a quarter to twelve." He was right. There was one or two come but when I didnt take them out to the tea room

they dropped the idea of coming at meal time. For the next three weeks I worked on my speech. I went to the library and looked up all I could find about Russia, but there wasn't a thing about gardens in Russia. Finally one day I remembered that we had a Russian Jew who was a tailor in Riverbend and I got him to give me his ideas about the garden in Russia. He said he left there when he was 12 years old but he gave me some startling facts which I worked into my speech. Then I went to a preacher who lives in my neighborhood and he spent three evenings after supper giving me lessons on how to wave my arms and when to raise my voice. I had never given a talk before except the time I made a few remarks before the Riverbend Civic Club, and one time when I seconded the motion at the Convention in Chicago.

Finally the day came for the talk. It was a blustering and snowy day but I made the 30 miles drive to Lake Park and got there at 2:30 prompt which was the time for the meeting. The maid let me in and says that Mrs. Blup was dressing and I should wait in the reception room. At a quarter to three she came down and the first thing she says was, "We call the meetings at 2:30 but don't usually get started till three." It was just three o'clock when two ladies came. One was the old lady that liked the Planters Punch so much. She was a nice old lady. She told me she lived at a hotel and didn't have no garden but she enjoyed the talks and working with the group, she said. The other lady said she lived in a rented house and she didn't have no chance to plant anything but she did so long to plant some things and some day she surely would have a place of her own. At

ten after three there was two more ladies come. We waited till 3:30 and Mrs. Blup says we might as well get started as it looked like that was all that was going to show up. She says there are so many gone south for the winter and then there is a lot of bridge parties this week. "We will have the business meeting first", she said "and then we will have a lovely talk on the Gardens of Russia." I said, "I will go into the other room and look over my talk as I could see that the business meeting was not for me." I could not help but hear all the conversation so I could not keep my mind on my speech.

The first matter of business, Mrs. Blup said, was entries for the Garden Show. One group was to be the Dune Gardens Group. This was to be all sand with one twisted pine draped across the scene. That would be easy to make they said, provided they could get a twisted pine. Mrs. Blup called me in to find out if the club could get a twisted pine at the nursery. She said it could be an old pine that would not be of any value and I said that the nursery would be glad to donate a tree. So I went back into the other room. There was another yellow garden that they thought they might enter. They would have yellow tulips and yellow roses and some yellow evergreens. They called me in to see if we had any yellow roses or tulips or evergreens. I said we might be able to get some tulips and have them grown in a greenhouse and get them in bloom for the show. Furthermore I said we could probably let them have a yellow arborvitae for the background. They argued on and on about the "entry". It got to be 4:30 and two ladies said they had to get to the

[Continued on page 15.]

OREGON LEADERS.

Through the coöperation of the officers of the Oregon Association of Nurserymen and the staff of the Oregon agricultural experiment station, the success of the spring meeting of nurserymen at Corvallis was made possible. These two groups have found the true keynote of harmony in working together for the good of the industry.

The Oregon experimental station is given hearty and appreciative thanks for the splendid service its staff is rendering to the nurserymen of the state. Comments heard after the spring meeting, which presented results of recent research work by the station, emphasized that it was instructive and beneficial. There is a renewed enthusiasm among the nurserymen and a stronger spirit of co-operation for the mutual interest of all. The meeting was reported in the May 1 issue of the American Nurserymen.

On this page is reproduced a group photograph, taken at the Corvallis meeting, of the station staff and the association officers. Those shown are: Back row, left to right: J. S. Wierman, superintendent of state nursery service; Prof. G. R. Hyslop, head of division of plant industry; Dr. F. P. McWhorter, plant pathologist, United States Department of Agriculture; Elmer Hansen, assistant horticulturist; John Milbrath, research assistant; W. D. Edwards, assistant entomologist. Front row, left to right: E. P. (Mike) Dering, president, Oregon chapter A. A. N.; Prof. Henry Hartman, horticulturist; J. Frank Schmidt, president, and J. E. French, secretary, Oregon Association of Nurserymen.



Staff of Oregon Experiment Station and State Association Officers.

Reports on Fruits

FRUIT PROSPECTS.

Freezing weather during early April caused considerable damage to fruit crops in some states, but May 1 prospects were reported by the bureau of agricultural economics as generally favorable in most important producing sections.

Frost injury was rather extensive to peaches and cherries in the central and north Atlantic states, and some damage to apples and pears was reported in Virginia. In Texas and Oklahoma, prospective peach production was reduced materially by frost and wind damage in early April. Growing conditions continued favorable for most fruit crops in the west, but low temperatures in Idaho and northern Colorado since May 1 have reduced prospects to some extent in these states. Citrus crops from the new bloom continued to progress under favorable conditions in all states except Florida, where lack of sufficient rainfall has caused the drop-page of young fruit to be heavier than usual.

NEW FRUITS LEAD.

Old varieties of orchard fruits are rapidly dropping out of the race in New York state. The Baldwin apple is still the leading variety, but is now barely ahead of McIntosh. Among peaches Elberta is still the mainstay, Bartlett is the leading pear variety, and Italian leads the prunes.

Rhode Island Greening and Northern Spy are two old apple varieties that are holding their own, following McIntosh in order of importance. Wealthy is next, closely followed by Cortland, which is used for more new plantings than any other variety except McIntosh. These six varieties account for seventy-three per cent of the apple trees of all ages in New York state. Ben Davis, Hubbardston, Dutchess and Twenty Ounce are losing favor.

Early-ripening peaches are replacing the Elberta for near-by markets. Of these Halehaven is promising and may take the place of South Haven. Golden Jubilee is a good early yellow freestone. Earliest of all is the new Oriole, from the New Jersey experiment station.

Other Elberta-type peaches are Ve-

dette, Valiant, Viceroy and Veteran. All have good color and quality and bear well, but may require thinning to reach large size.

Italian prune is the outstanding commercial plum. The German prune is more hardy and productive, but the fruits are small. The best of the new plums is Stanley, a large prune that is more productive than Italian.

Bartlett, Seckel and Bosc are still the leaders among pears. Kieffer is losing favor. New varieties, several of which are resistant to fire blight, have been developed, but are still on trial.

NEW PEACH VARIETIES.

Experiments to increase returns for both deciduous and citrus fruit growers are being conducted at Chaffey Junior College, Ontario, Cal., by George P. Weldon, pomologist. One experiment concerns peaches, of which he has developed three varieties which successfully resist the effects of delayed foliation caused by mild winters. Mr. Weldon is now seeking improvements along the line of early ripening. Eight trees in the Chaffey experimental orchard have been artificially fertilized with pollen from early varieties and then covered to prevent further pollina-

tion by bees from undesirable late varieties.

The three new varieties hybridized by Mr. Weldon and named by the Chaffey board of education are the George Weldon and the Chaffey, freestones, and the Fontana, a cling for canning. Mr. Weldon declined to patent the varieties, stating that his only desire is to aid orchardists struggling with trees that produce normal crops only every second year on the average, because of warm winters.

Mr. Weldon's other experiment aims for production of a frost-resistant lemon. On a tour of the district after the freeze of January, 1937, several trees were found which had come through the cold undamaged. From these, budwood was taken to graft eighty-five others. These will be set out in the Chaffey experimental orchard next month and from them it is hoped to secure the desired frost-resistant lemon and eventually obviate the need for orchard heating. M. H. L.

NEW DORMANT SPRAY.

The spray referred to in these columns recently as DN-oil is now available under the name Dowspray Dormant as a product of the Dow Chemical Co. for spring dormant application. It is composed of oil in which has been dissolved dinitro-ortho-cyclohexylphenol. With the

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Size	Each	10	100
2½ to 3 ft.	\$ 2.50	\$ 22.50	\$200.00
3 to 3½ ft.	3.00	27.50	250.00
3½ to 4 ft.	4.50	40.00	-----
4 to 4½ ft.	5.50	50.00	-----
4½ to 5 ft.	7.00	65.00	-----
5 to 6 ft.	12.00	100.00	-----
6 to 7 ft.	17.50	150.00	-----

\$ at 10 rate—25 at 100 rate.

Larger sizes and quantity lots priced on request.
Packing and boxing charges additional. All prices f.o.b., Rutherford, New Jersey.
Order a carload. Save packing and reduce freight charges.

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NEW JERSEY**

Catalogues or quotations on other needs as requested.

drums of the oil and toxic are supplied bags containing an emulsifier.

It is especially recommended for rosy apple aphid, green apple aphid; black cherry aphid, San José scale, European red mite, bud moth, scurfy scale and pear psylla. While one and one-half to two gallons of spray to 100 gallons of water are used for the insects just mentioned, much weaker dilutions are necessary for those on evergreens.

In connection with a recent recommendation of DN-oil, or this spray, F. L. Gambrell, of the New York agricultural experiment station, writes:

"In its use for pine-leaf scale, some hazard may be connected with its use, particularly at dilutions greater than one per cent. This fact was indicated in our experimental work during 1936, when two and four per cent dilutions of this mixture caused definite injury and shedding of needles on Scotch pine. Therefore, if one plans to use this material on pines, it would be best to consider it an experimental procedure rather than one which should be applied indiscriminately. By so doing the tolerance of various species of plants could be determined for the immediate area in which it is to be used."

ELM LEAF BEETLE.

Increasing prevalence of the elm leaf beetle in many communities within New York state has led to numerous inquiries at the experiment station at Geneva for directions on control measures, with the result that the station has prepared a brief illustrated circular setting forth essential facts in the life history, habits and control of this pest.

It is explained in the circular that the beetle overwinters as an adult and begins feeding about the middle of May, with egg laying commencing the latter part of May. Where no effort is made to control the insect, the most severe injury is observed in June and July, when the leaves become skeletonized and may turn brown and fall off.

Except in cases of extreme infestation, one spray treatment properly timed and thoroughly applied will suffice. This treatment is generally made the first or second week in June, depending upon the season, and is

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Small Fruits
Hardy Perennials
Greenhouse and
Bedding Plants
Bulbs and Tubers
SEEDS

Complete Nursery Supply

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PAINESVILLE, OHIO

aimed at the young larvae which are hatching at that time and beginning to feed on the leaves. Other and more drastic measures recommended where the elm leaf beetle infestation has assumed serious proportions due to neglect are described in the station circular.

CHARLIE CHESTNUT.

[Continued from page 13.]

meat market to get some pork chops for supper before the store closed. So they went out and then the maid brought in some crackers and some tea and at 5 o'clock they was ready for the talk. Mrs. Blup says I am sorry there was so much business that we can only give you about 10 minutes for your talk. I had my talk timed for one hour and a half as I had practiced it several times by the clock. Mrs. Blup suggested that as the time was so short how would it be

ROADSIDES

THE FRONT YARD
OF THE NATION

By J. M. Bennett

Superintendent of Parks and Forestry Board of County Road Commissioners, Wayne County, Mich.

Beautification of highways by the planting of trees and shrubs has been immensely stimulated by government appropriations for relief projects in recent years. Such work deserves the support of everyone interested in horticulture for its own merit and for the interest it engenders in the motoring public in such plant materials for private landscape use. Here is a book explaining what is being done and how. You should keep posted yourself and be ready to help your community in such projects.

\$3.00 per copy

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to have just a questions and answers period. As there wasnt no questions the meeting adjourned and now I have a good talk on the Garden of Russia for sale cheap. Never used.

In a few days the ladies were all at the nursery again. It was a warm day in Feb. and the mud was two or three inches deep. They wanted to pick out the Golden Arborvitae and the twisted pine and they wanted to mark it in the nursery to be sure to get just the shape they wanted. I says, "Do you want to go out in the mud way back in the nursery?" "Yes", they said, "we all have our rubbers." So I got on a pair of rubber boots and started out. One lady had to go back. She lost a rubber and her shoe with it and she had to go back to the office in one stocking foot and one shoe. She was still standing by the stove with her one shoe in her hand when I got back from the field. One lady stepped into a hole where we had dug out a maple. It was covered over a little with thin ice and she was wet clear up to where it was uncomfortable so she had to go back. Finally we picked out a tree that was on the far end of the row. It was one that a horse had stepped on and didnt have no top but only one long side branch. That was just the one they wanted so I put a tag on it for them. Then we picked out a Golden Arborvitae. I was a big one about 8 feet high.

When we got back to the office Mrs. Blup says we want the trees delivered to the show on March 15th. I says that will be hard to do because it is liable to be a blizzard in March and then the frost will still be in the ground and how can I dig it, I says. But there was no way to change that I could see so I told her we would have it ready. She says you send the trees by truck and some of the ladies will be there to receive them. I says you be sure to be there as I will send the trees by a trucking company and you will have to be there when the trees come to pay the hauling. She was a little put out at that as she said that another nursery sent them prepaid last year. I was going to ask her why she didnt go back to the same nursery but I thot better of that.

I was beginning to think that garden clubs was quite a bother. But that was only the beginning. Next day a car of ladies come from the Rose Chapter. Mrs. Blup had told

them that they could get their twisted pine out here and they were going to have an entry. I didnt keep count of all but if I remember right there was over twenty calls for free twisted pine and about the same for Golden Arborvitae without any charge.

We had a heavy snow early in March and it was 10 above zero the day we went to dig the twisted pines. It took up three days with 5 men but we finially made it. Two of the men was sick with the flue for four weeks afterward.

The day before the show opened Mrs. Blup called me in a great state of excitement. We got the tree she said but where is the yellow tulips and the yellow roses. She said I promised to send them, which I swear I never did. What will we do, she said, the ladies are frantic because the show opens tomorrow and our entry is not ready. The upshot was that I had to call up six different florists in the city to get the flowers and they cost Emil \$30. On Sunday Emil and I went in to the show. After we had gone through all of the exhibits of paring knives, books, perfume and lawnmovers, we come to the Dune Gardens. Thats a hell of a ad for a nursery, says Emil. A mess of twisted pines and some sand. In front of the Petunia Chapter entry was Mrs. Blup. She was talking to two other ladies and did not see Emil and I. I could see she was takin orders for a mail-order house in Iowa. The club gets 15%, she was tellin the ladies. We walked on. The garden clubs is sure a big boon to the nursery business aint they, said Emil.

LIGHTNING PROTECTION.

[Continued from page 10.]

because the resulting galvanic action has been found to kill the cambium beneath the cable and also to destroy the nails. The use of insulated fasteners for conductors should be avoided since the potentials of lightning strokes are so enormous that small insulators cannot withstand them. Then, too, it is important that nothing interfere with the free passage of the surface charge from the tree to the conductor.

8. Ground terminals.—When a stroke is about to take place to earth, the surrounding surface of the ground carries an electric charge for miles around. As the discharge takes place, this surface charge moves radially toward the ground end of

the air path, forming an electric current in the ground. Near the point where the discharge enters the ground the current density becomes high, and if the flow takes place through a tree and its root system, the damage may be great. Ground terminals should be distributed, therefore, more or less radially about the tree beyond the root system, rather than on one side close to the tree. Three interconnected ground terminals should be provided for each down conductor. These should be driven into permanently moist ground, if possible, but if many rocks are encountered a network of wires just under the ground surface will provide a satisfactory ground.

9. Maintenance.—Since a protection system should remain in working condition for a long time, strong materials and firm attachments should be used. Servicing will be necessary every three to five years, however, to extend air terminals, to check the entire system and to replace imbedded trunk attachments.

10. Ornamentation.—The use of fancy ornaments, special air terminals, glass balls, weather vanes, insulators, etc., is unnecessary and undesirable, since they serve no useful purpose and only add to the cost. The best protection system is the simplest and least conspicuous.

Lightning-struck Tree Survey.

Observations by various people have indicated that there is con-

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We also collect the Small Native Peach Pits so extensively used.

Write for quotations on both Mazzard and Peach Pits, stating quantity required.

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NATIVE PLANTS**

Fall Trade List will be in the mail July 1.

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Cuspidata Capitata

1½ to 9 feet.

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Selected uniform plants; bushy and foliated to center; masses of fibrous roots. Finished specimens from 4 inches up, ready for quick shipment. Prices lower, plants larger. Ask for special list.
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siderable difference in susceptibility to lightning attack among trees of different species and in different environments. It is thought that trees standing alone or above their fellows, and trees along avenues, streams and lakes are struck more frequently than others. Studies made abroad tend to show that oak, elm, pine, poplar, maple, ash and spruce are struck frequently, while beech, birch, horse chestnut and holly appear to be relatively free from lightning attack. Deep-rooted trees are generally believed to be more liable to lightning injury than those with shallow widespread root systems, and as a general rule decayed or rotten trees are greater sufferers from lightning than sound undecayed specimens. It is also thought that vertical air currents arising from topography changes and the prevalence of underground metallic deposits are important factors in the susceptibility of trees to lightning injury.

So far as can be ascertained, little careful research has been attempted, at least in this country, on the varying phases of lightning injury to trees. In order to advance general knowledge along these lines, the National Shade Tree Conference is sponsoring a survey of lightning-struck trees through its widespread membership. This survey only started after the 1936 conference, so that detailed results will not be available for some time.

Perhaps others would like to coöperate with the conference in reporting cases of lightning-struck trees which come to their attention. Over 300 individuals are now coöperating in the survey, and we should like to have hundreds more.

In order that the data which are obtained by individuals may be on a uniform basis, a supply of forms has been printed and distributed. An examination of a form will indicate the large amount of data that we expect to tabulate when a sufficient number of reports have been received to determine conclusions. The relative importance of the various data is still unknown, so that we are asking our collaborators to make their reports as accurate and complete as possible. Only by the accumulation and study of thousands of case histories from a widespread area will general knowledge of lightning-struck trees be advanced.

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Grafted plants from 2½-in. pots

Acer palmatum ashi-beni.	\$3.50	100
Acer dissectum atropurpureum	3.00	25.00
Thuja occ. Douglasii spiralis	2.25	20.00
Thuja occ. elegantissima	2.25	20.00
Thuja occ. lutea Mary Corey	2.25	20.00
Thuja occ. pyramidalis	2.25	20.00
Thuja occ. Rosenthalii	2.25	20.00
Thuja occ. Wareana (sibirica)	2.25	20.00
Thuja orientalis aurea nana	2.75	25.00
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Juniperus virginiana,	100	1000
to 6 ins.	\$3.00	\$25.00
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Pseudotsuga Douglassii,		15.00
4 to 6 ins.	2.50	20.00
Syringa vulgaris,	4 to 6 ins.	2.00
Thuya orientalis,	3 to 6 ins.	1.50
Thuya orientalis,	8 to 12 ins., transpl.	5.00

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Pacific Coast News

PORLAND CLUB MEETS.

News and Views of Nurserymen.

The Portland Nursery Club held its monthly meeting at Portland, Ore., Wednesday evening, May 11, with an average attendance. A letter received from Walter R. Dimm, secretary of the Pacific Coast Association of Nurserymen, and Mrs. Dimm, who are now traveling in Europe, indicated that they are having a glorious time.

M. McDonald, president of the Portland Nursery Club, asked for a few reports on the recent meeting at Corvallis for the benefit of those who did not attend. This spring meeting was a little different from most meetings in that little business was done, but the complete time was given over to reports of work at the experiment station. John Wieman, state superintendent of nursery service, stressed the fact that nurserymen have just started in on the co-operative arrangement with the experiment station and can look forward to added developments and more progress in the future. The staff at the experiment station is speaking and working in terms of the nurserymen. The staff is really enthused, and the interest shown by the nurserymen in their work is a fine stimulus.

J. Frank Schmidt, Troutdale, president of the Oregon Association of Nurserymen, announced that the American Nurseryman, the nurserymen's own trade journal, had been adopted by the association as its official organ and said that cards had been sent out to this effect. The executive committee of the association is working on means of gaining publicity and is receiving fine cooperation from local newspapers and other sources.

Activities Told.

Most of the nurserymen are busy at the present time with trimming, cleaning up weeds and cultivating. Cool weather recently slowed up growth on a few things, but on the whole plantings are looking good.

William J. Enschede reported that he was busy cultivating about thirty acres of Manetti rose stock, which will be used by florists for grafting.

Frank Shephard, of the Portland Rose Nursery, said that the firm's sales are slacking, which is normal for this time of year. The rhododendrons are just starting to bloom and interest seems to be keen. Many persons have been waiting for them to come in bloom before buying. In fact, about seventy-five per cent of the sales now are after the plants come in bloom.

Along this same line, A. M. Doerner, of Doty & Doerner, Inc., stressed the fact that buying after the plants have come in bloom seems to be a general trend. People are asking for named varieties, and as better classes are developed they will buy them in bloom. This seems to be a good thing as it prolongs the season.

William Borsch & Son, Inc., Maplewood, Ore., has finished planting 12,000 phloxes, 7,000 bleeding hearts and 10,000 poppies. Fred Borsch, of this firm, reported that it is still doing considerable selling.

Peterson & Dering, Inc., Seapoose, is constructing a new office. Mike Dering expects to leave the early part of June on a 12,000-mile selling trip, during which he will travel in about thirty-five states. He will take his camera and hopes to take numerous color photographs.

J. Frank Schmidt & Sons have been busy transplanting lining-out stock from the greenhouse.

James French reported that the greenhouse men have practically cleaned up this year. It is hard to get anything in bedding plants without ordering ahead.

Doty & Doerner, Inc., is constructing a new glasshouse, 32x100 feet, which will be used for the housing of camellias.

Bulb Notes.

S. P. Hall, Multnomah county agricultural agent, speaking for the bulb growers, said that daffodils were having an ideal growing season. They are coming along fine, and there should be good-quality bulbs this year.

In this section of the state, the gladiolus growers are gradually increasing. The tulip industry in the northwest has also been growing the last two or three years.

Mr. Hall also mentioned that a home beautification program is being started as a part of the extension service. The co-operation of nurserymen is sought in getting speakers to represent the association and meet with the groups which are making a study of home beautification.

John Wieman, superintendent of nursery service, was commended for the excellent way he has worked with the nurserymen and for them.

A newly appointed transportation committee for the Oregon Association of Nurserymen consists of Paul Doty, Mike Dering and Max Perrin.

KELLY'S GOLDEN ANNIVERSARY.

The fiftieth anniversary of the founding of the business is being celebrated this year by the Kelly Plant Gardens, Spokane, Wash. This concern, which now handles plants, shrubs, trees, seeds and bulbs, had an interesting beginning when A. A. Kelly founded it when a boy of 21.

With no other qualifications than determination and ambition, Mr. Kelly signed a 3-year lease on seventeen acres of land just west of Spokane and began to grow fruit and vegetables.

The first real success for the venture came in 1889 after a disastrous fire in Spokane had demolished almost the whole business section. There was a shortage of food, and since transportation was slow in those days, it meant big business for the local producer.

Ten years later, Mr. Kelly and his wife, whom he married in 1890, added twenty acres to the property. The first greenhouse was 12x60 feet in size. Although most of the business had been retail, increased acreage made wholesale trade natural. One hundred thousand asparagus roots from the Kelly Plant Gardens were shipped to California and became the first asparagus plantation in the Imperial valley.

Greenhouse area was increased as a

line of flowers and bedding plants was adopted. Now propagation and growing of ornamental shrubs and trees is also done and a complete nursery maintained. Tulips, narcissi, lilies and gladioli are the specialties in the bulb line. Fruit trees of all kinds are found in the orchards, and there are also plantings of berries, especially strawberries.

Mr. Kelly served five terms in the state legislature and was chairman of the horticultural committee during that time.

Now, Mr. Kelly believes he has earned a period of rest, and he is preparing to turn over the active management of the concern to his son, Harry X. Kelly, who has been well trained to take the reins.

ENJOINS SEATTLE UNION.

Superior Judge Calvin S. Hall April 30 granted an injunction permanently restraining the Building Service Employees' Union from picketing the establishment of the Richmond Nurseries, at Richmond Beach, near Seattle, Wash., and ordered the union to pay \$500 damages to the plaintiff firm because of business lost to it because of the picketing.

Judge Hall held that the picketing of the nurseries by the building service union was unlawful. Superior Judge Donald A. McDonald had granted a temporary injunction against the union a month before.

In his complaint against the union, J. W. Adams, owner of the Richmond Nurseries, contended there was no dispute among his employees over wages and hours. He declared that the union was not authorized to picket his establishment by the Central Labor Council and that the union had no jurisdiction over nurserymen.

During hearing of the case, Basil

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P. Rubra ¼ oz., 80c; oz., 2.40

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Fruit and Shade Trees. Evergreens. Shrubbery.
all sizes up to 10 ft. California Privet, 3 to 7
ft. in shades. Heather, assorted, 8 to 18-in.
clumps. Evergreen Privet and Barberry. Peren-
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We have a very complete line.
Trade list sent on request.

WHOLESALE GROWERS

of a complete line of Nursery Stock
including Fruit Tree Seedlings.

Lake's Shenandoah Nurseries
Shenandoah, Ia.

Gray, chairman of the executive board of the Central Labor Council, testified that the picketing was unauthorized by the labor council.

MEET AT OAKLAND, CAL.

The Central California Nurserymen's Association heard J. Lee Hewitt, chief of the bureau of nursery service, department of agriculture, at the meeting at the California hotel, Oakland, May 12. Mr. Hewitt talked on the benefits of the grades and standards law. Alfred Morris, San Fernando, and Gene Fowler, Newcastle, respectively president and vice-president of the California Association of Nurserymen, were guests of the Central association at the dinner. A special campaign to obtain members for the Central group is being carried on under the direction of Harry Hoaglund, of the Pacific Guano Co. Messrs. Morris and Fowler were in Oakland for a meeting of the board of control of the state association held at the Oakland hotel May 12. Plans are being made for the state convention, which will be held in Hollywood September 28 to 30.

CALIFORNIA NOTES.

Harold McFadden, president of Horticultural Industries, Inc., and owner of the Del Amo Nurseries, Compton, is laying out a model rose garden and an evergreen garden on his large acreage.

The tree rose growers' group of Horticultural Industries, Inc., under the chairmanship of Herbert Swim, of the Armstrong Nurseries, Ontario, held its second meeting of the spring season recently to review mutual problems. John Van Barneveld reported progress on the excellent cost survey that the group has made.

At the Horticultural Institute meeting May 19 at the Mayfair hotel there was a variety of subjects discussed by able speakers. Walter Scott, of the Armstrong Nurseries, reported on innovations in avocado, citrus and ornamentals. Franklin Reudel, known as the Oklahoma Gardener and now engaged in shipping, at Los Angeles, discussed "Applying Scientific Principles to Your Business." Jack Evans, of Evans & Reeves, gave authoritative information on "Fuchsias."

The University of California is instituting at Westwood courses in subtropicals and ornamentals and, wishing to cooperate with the nursery and florists' trade, has asked Horticultural Industries, Inc., and Southern California Horticultural Institute to supply facts concerning the problems of the nurserymen. Horticultural Industries, Inc., through Harold McFadden, president, accordingly instituted what he called a horticultural roundup, that might also be described as a short course in horticulture. There was an all-day session on Monday, May 23, at the Del Amo Nurseries, Compton, with Mr. McFadden as host. The university was represented by a number of members of its faculty; California Institute of Technology also was represented; the local F. H. A. office told how to sell landscaping to home builders. The California bureau of nursery service participated, as did the Los Angeles chamber of commerce.

The Pasadena annual cactus show was held at the Rust Nurseries, Pasadena, May 13 to 15 and attracted a large number of visitors with a fine display.

FALL 1938

ELM, American, Moline and Vase, up to 4 ins. All transplants.

MAPLE, Norway, up to 3½ ins. Transplants, extra select, spaced 7x7 ft.

POPLAR, Lombardy, up to 2 ins.

WILLOWS, Thurlow, up to 3 ins.

BARBERRY, Thunbergii, up to 2 to 3 ft.

SPIRÆA, Vanhouttei, up to 5 to 6 ft.

APPLE, 2-year.

CHERRY, 1-year.

PEACH.

All of above items can be supplied in carload lots.

Send for list on many other items.

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Bridgeport, Indiana

Largest Nursery in Indiana. Est. 1875.

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Wholesale Growers of
Grapes, Currants,
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Evergreens — Shrubs
Lining-out Stock
Send for Complete Trade List

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New Carlisle, O.

20,000 A. R. N. Privet Liners. Hurry!

Last call—20,000 Amoor River North Privet Liners, 6 to 18 inches, in dormant, prime planting condition. 5000 for \$35.00; 10,000 for \$55.00; 20,000 for \$100.00. Cash with order, packing free. Hurry your orders, by return mail.

ALTA VISTA NURSERIES Davenport, Iowa

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Coming Events

NORTH CAROLINA MEETING.

A nurserymen's short course will be held at North Carolina State College, at Raleigh, June 16 to 18, according to the announcement of C. H. Brannon, state entomologist, who is secretary of the North Carolina Nurserymen's Association.

IOWA SUMMER MEETING.

The Iowa Nurserymen's Association will hold its annual summer meeting at Shenandoah, June 30. Nurserymen from neighboring states are invited to attend, and the opportunity to visit this important nursery center will no doubt draw a large attendance.

OKLAHOMA PROGRAM.

The executive committee of the Oklahoma State Nurserymen's Association met May 14 and set the dates for the summer meeting of the association at June 15 and 16. The meeting will be held at Tulsa, in the Hotel Tulsa. Those wishing to display products may have space by writing to Hotel Tulsa for reservations.

The Tulsa Retail Nurserymen's Association will be host to the state organization. A banquet will be held the first day at the hotel. The second day the meeting will be held in Mohawk park, and an old-fashioned barbecue will be the climax of the meeting.

The program is as follows:

JUNE 15, 9 A. M.
Registration in assembly hall.
Address of welcome.
Report by C. E. Garee, Noble.
Report of secretary, J. A. Maddox, Oklahoma City.

Introductions and discussions.

Luncheon.

JUNE 15, 1 P. M.

Address, by Dr. F. M. Rolfe, research plant pathologist.

Organization of chapter of American Association of Nurserymen.

Tour of city and parks, including the municipal rose garden.

JUNE 15, 7 P. M.

Banquet at Hotel Tulsa. Introduction of J. T. Foote, Durant, who in turn will introduce J. C. Scott, president of the state board of agriculture. Other introductions by the toastmaster, T. A. Milstead.

JUNE 16, 10:30 A. M.

Assembly at Mohawk park.

Address by Mr. Doolittle, editor of National Parks and Recreation magazine.

Free barbecue, with Mario Sanseverino chief carver.

All nurserymen are invited and urged to come to this meeting.

J. A. Maddox, Sec'y.

SET NEW JERSEY DATE.

At the meeting of the executive committee of the New Jersey Association of Nurserymen held May 18, the date for the summer convention was set for Tuesday, July 26. The place of meeting will be the New Jersey experiment station at New Brunswick.

Details of the meeting are still incomplete, according to Secretary Charles Heas, Mountain View, N. J., but a committee has been named, headed by L. C. Schubert, New Brunswick, to work out the program and report at the June meeting. It is the intention to have demonstrations and talks on timely subjects, with a short business session and luncheon at the log cabin, on the station grounds, and a dinner in the evening at the Roger Smith hotel in New Brunswick.

PEONY SHOW AT LANSING.

Free Storage for Show Blooms.

The annual exhibition of the American Peony Society, now being termed the international peony show, will be held at Lansing, Mich., Saturday and Sunday, June 18 and 19.

Those in charge of the event state it promises to be one of the most outstanding shows ever held in Michigan. Because of the abnormal season, however, many peony growers will find it necessary to store their blooms until the time of the show, three weeks hence. The show committee has made arrangements for the storage of blooms at no cost to exhibitors. Lewis Holecomb, of the Smith Floral Co., Lansing, who is chairman of the storage committee, made the following announcement this week:

"We have made arrangements with the Michigan Butter & Egg Co., Lansing, to store those blooms that are shipped in. No charge will be made to you for this storage. It will be necessary, however, for you to pack them in corrugated boxes in such a way that they may be left in the boxes until the time of the show. Our experience has been that by cutting the buds when they are just opening out, soaking them up in deep water, then drying them off carefully and placing them in corrugated boxes which have been lined with paper, the blooms can be kept satisfactorily for one to two months."

"Address your shipments to Lewis Holecomb, the international peony show, Michigan Butter & Egg Co., 703 East Kalamazoo street, Lansing, Mich. Please have your entries properly labeled so that they may be set up in case you are not coming through for the show."

DISPLAY grounds at New Providence, N. J., were recently opened by the Murray Hill Nurseries, Murray Hill, N. J. A display of tulips is being featured this month.

These Iris Aristocrats

will make you money if you have them on your grounds where your customers can see them. There's no profit in the old-timers any more because all your customers have them; but try a hundred of these modern varieties. Taken from our large list for a large color range, outstanding size and profusion of bloom and watch your customers "go for them".

Frieda Mohr, Mildgard, Pluie d'Or, Santa Barbara, Souv. de Mme. Gaudichaud, Amber, Ambassadeur, Princess Beatrice, Duke of Bedford, Dr. Charles Mayo.

10 each of these fine iris for only \$2.95; 30 of each for \$7.95.

July-August delivery. Complete list on request. Now booking orders for hardy lillies, muscari, hemerocallis for autumn delivery. Write for special low prices for advance orders.

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Ask for WHOLESALE CATALOGUE
1300 VARIETIES
IRIS AND PEONIES
QUALITY!
C. F. WASSENBERG - Van Wert, O.

NEW FLORIDA GROUP.

At the annual convention of the Florida State Florists' Association May 15 to 17 at Tampa, the nursery group of the organization perfected plans for forming the Florida State Nursery Association and elected officers. The new association will operate under the constitution and by-laws of the parent organization. All nurserymen in the state will be eligible for membership in the group, however, without being members of the state florists' association.

The new officers are: President, M. J. Daetwyler, Orlando; vice-president, James Donn, Miami; secretary, W. B. Shippy, Gainesville, and treasurer, Carl F. Cowgill, Tampa.

COMING EVENTS.

June 15 and 16, Oklahoma State Nurserymen's Association, summer meeting, Hotel Tulsa, Tulsa.

June 16, Southern California Horticultural Institute, annual meeting, Hotel Mayfair, Los Angeles.

June 16 to 18, nurserymen's short course, North Carolina State College, Raleigh.

June 18 and 19, American Peony Society, national show and annual meeting, Michigan State College, East Lansing.

June 21 and 22, American Rose Society, summer meeting, Hartford, Conn.

June 30, Iowa Nurserymen's Association, summer meeting, Shenandoah.

July 6 to 8, Pacific Coast Association of Nurserymen, annual convention, Seattle, Wash.

July 7 and 8, North Carolina Association of Nurserymen, annual meeting, Asheville.

July 19 to 21, American Association of Nurserymen, annual convention, Book-Cadillac hotel, Detroit, Mich.

July 31 to August 2, Virginia Nurserymen's Association, annual meeting, Virginia Polytechnic Institute, Blacksburg.

August 21 to September 2, annual National Shade Tree Conference, Coronado hotel, St. Louis, Mo.

September 28 to 30, California Nurserymen's Association, annual meeting, Hotel Roosevelt, Hollywood.

September 30 to October 2, annual Texas rose festival, Tyler.

Potted Perennials

Plant now for summer sales.

Sell on sight when in bloom, move easily with a little soil and are profit-makers for July, August and September. Shipped with pot ball intact and are sure to live.

Chrysanthemums, early azalea type, many colors.

Korean Mums, five fine varieties.

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Carnations, Japanese Anemone.

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Hardy Phlox, many new varieties.

Reasonable prices, send for list.

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PEOONIES
All types, including Tree Peonies
The Cottage Gardens
Lansing, Mich.

Oregon-grown ROSEBUSHES

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New Rose TEXAS CENTENNIAL

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Ask for color illustration
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LOCAL MAHALEB SEED
High germination. July delivery.
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Juniperus scopulorum
(Cleaned seed)
Also seeds of other trees, shrubs and
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FRUIT TREE SEEDLINGS
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Apple, 3/16-in. \$12.00
French Pear, 3/16-in. 12.00
Myrobalan Plum, 1/4-in. 12.00
These are well graded, sturdy, healthy seedlings,
on which we do our own budding and are sure to
please. Supply limited.

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HERBS
Pet-grown plants: over a hundred varieties.
Dried Herbs for Flavorings and Fragrances.
Other plants of unusual character and
with the charm of old-time gardens.
Write for Catalogue

Weathered Oak Herb Farm, Inc.
BRADLEY HILLS, MARYLAND

ROCK GARDEN SOCIETY ELECTS.

At the American Rock Garden Society's fifth annual meeting, May 16, the business session was held in the Administration building, prior to the inspection of the Thompson memorial rock garden at the New York Botanical Garden, New York. Mrs. Clement S. Houghton, Chestnut Hill, Mass., was re-elected president; Mrs. Dorothy E. Hansell, Summit, N. J., secretary, and Robert Senior, Cincinnati, O., treasurer. T. H. Everett, horticulturist of the New York Botanical Garden, was elected vice-president, and Mrs. Francis Corcoran, Saugatuck, Conn.; James G. Esson, Great Neck, N. Y., and Dr. Ira N. Gabrielson, Washington, D. C., and Portland, Ore., directors for three years. Walter Blair, Tarrytown, N. Y., was elected to fill the unexpired term of the late Mrs. Louise B. Wilder, widely known for her garden books and articles in magazines and newspapers and an outstanding exponent of rock gardening.

Among the host of interesting plants seen during the visit to the Thompson memorial garden were *Antennaria apriaca*, from the west coast; *Chrysogonium virginicum*, from Piedmont, N. C.; *Cypripedium parviflorum pubescens*, a native orchid brought to the garden from Westchester county, N. Y., and *Tulipa formosa* and *T. viridiflora*.

Later in the day, the members visited the attractive rock garden of Mr. and Mrs. Walter D. Blair, Tarrytown, N. Y.

IRIS SOCIETY MEETING.

Registrations for the eighteenth annual meeting of the American Iris Society, held at the Netherland Plaza hotel, Cincinnati, O., May 14 and 15, totaled close to eighty. Almost every state east of and including Nebraska was represented by at least one member. A special meeting of the board of directors was held the morning of May 14, over which President Harry Everett, Lincoln, Neb., presided. Regional Vice-president Mrs. Silas B. Waters, Cincinnati, announced the order of entertainment planned for the visitors.

Throughout the entire afternoon, the members were taken on a tour of the local iris gardens, those of John Dee Warham and Mrs. Julius Emigholz (Kenwood Gardens) being of chief interest. A banquet was served at 7 p. m., followed by addresses by President Everett, Secretary B. Y. Morrison, Washington, D. C., and others. Colored slides depicting new varieties of irises were shown by Mrs. H. Lewis, vice-president of the Massachusetts region.

Sunday, May 15, the members were again taken on a tour of iris gardens, but because of poor weather conditions, many of the larger estates in the Indian Hill region were not visited as planned.

The society has not definitely decided upon the city in which to hold its 1939 meeting, but it is understood that some city in California will be selected. A number of commercial iris growers were represented at Cincinnati.

ONE of the largest projects of recent years was undertaken recently by the State Nursery & Seed Co., Helena, Mont. It was the moving of a 6-ton, 20-year-old Colorado blue spruce tree which T. E. Mills, manager of the nursery, believes is one of the most beautiful trees of its kind in the country.

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To the Trade Only

A complete line of
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Fruit Tree Seedlings
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Grown right and packed right

Combination carloads to eastern distributing
points save you on freight.

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"Pioneer Nursery of the Northwest"

Fruit, Shade, Flowering and Ornamental Trees, Fruit Tree and Chinese Elm Seedlings. Car lot advantages to all points east. Send for our Trade List.

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Fruit, Shade, Flowering Ornamental Trees, Fruit-tree Seedlings, Roses, Etc. Very complete line of quality stock

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Largest Fruit Tree Seedling Growers
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We accept growing contracts for 3 to 5 years. Quality stock. References on request.

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Landscaping at Shows

CHICAGO HOME SHOW.

The importance of trees, shrubs and lawns in creating examples of ideal homes was clearly demonstrated at the National House and Garden Exposition at the Coliseum, Chicago, May 14 to 22. More than 165,000 persons attended the show, and John A. Servas, managing director, reported that the exhibition was the most successful of the series and indicated a revival of interest in residential building.

The principal feature of this year's exposition was low-priced homes. Last year, in the same place, the exposition featured homes costing between \$8,000 and \$15,000. The public's interest was light. This year, homes costing from \$3,500 to \$9,000 were shown, and the public was greatly interested. In addition to exhibits of all appliances and needs for homes, brick manufacturers' associations and other organizations erected complete houses and quoted construction costs between the figures mentioned. Not one of these houses was without planting. The landscaping of the small properties, while not at all elaborate, of course, proved conclusively that even a comparatively cheap home can be made attractive and can be made to appear more expensive by the addition of lawns, flowers, shrubs and trees.

The exhibits of nurserymen and landscapers in the Chicago area provided the decorative feature of the exposition, which would have been quite barren without these horticultural features.

In the main hall of the Coliseum, the Pfund-Bell Nursery Co., Elmhurst, Ill., used evergreens at the corners of the house and at the ends of the lot to enhance the "castle" home sponsored by a local newspaper. A similar scheme of planting was used in another house sponsored by this newspaper by the F. D. Clavey Ravinia Nurseries, Inc., Deerfield, Ill. This nursery firm also provided the planting for the Instone house. A summerhouse was landscaped by the Chicago Landscape Architects, Chicago. Axel Setterberg, landscaper, used flowering annuals and just a few evergreens to enhance the appearance of the Bartlett model home.

In the north hall of the Coliseum the big feature was a summerhouse surrounded by four gardens separated by walks. One was a rose garden installed by Beaudry & Associates, Chicago, in the center of which was a circular bed of caladiums, hydrangeas, spireas and callas installed by Axel Setterberg. Another of the gardens contained an old-fashioned well, flanked on both sides by evergreens; this was installed by the Pomona Landscape Service, Chicago. Another was a rockery with a pool constructed by Martin C. Andersen & Sons, Chicago. The last was named "The Garden Kitchen" and was composed mainly of a brick fireplace and walls; the lawn and the few plants were provided by Martin C. Andersen & Sons.

The Federal Housing Administration had a large booth at the exposition where literature on F. H. A. loans was available. Attendants explained methods of securing F. H. A. loans for rebuild-

ing or new construction and pointed out that such loans are available for the purpose of landscaping properties.

KANSAS CITY GARDEN SHOW.

Flowers from more than seventy gardens in Kansas City and vicinity were on display at the annual spring flower show sponsored by the Kansas City Gardens Association in the exhibition hall of the Municipal Auditorium, May 14 and 15.

The background for the show was arranged by some of the local florists, nurserymen and seedsmen. These exhibits were noncompetitive. The William L. Rock Flower Co. had a large display of palms, eustomas, hydrangeas, calceolarias and other blooming plants. The arrangement was near the entrance of the auditorium and occupied a large space. A display of statuary by the Kansas City Art Institute had a background of evergreens and rosebushes, with a foundation of blue grass, arranged by the Holsinger Nursery Co. and the Soil Service Co. Nursery. An extensive desert garden, containing about forty varieties of cacti, was arranged by the Morningside Greenhouses.

The horticultural department of the public schools had a rock garden and pool, with goldfish and a fountain. In the display of the Chandler Landscape &

FOR SALE

My property and business on Grand River avenue, one of the finest highways in the world, 3 miles from Detroit city limits. Have been here 25 years. Have done an honest business and built up a good reputation. Trade is about 40 per cent of the city of Detroit. Reasons for selling. Price right and easy terms to the right purchaser. Will assist April, May, September and October. An outlet for a wholesale nursery.

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By nurseryman competent of taking complete charge of production or selling to the trade, 26 years' experience; thoroughly familiar with either branch of the business. Desires permanent connection with reliable nursery. Will go any place, but prefers middle west or south.

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Peonies: Tree and Herbaceous, best varieties. Oberlin Peony Garden, Sinking Springs, Pa.

Nurserymen, Attention!

Can you afford to miss this?

RED CUSHION, \$5.00 per 100.

WHITE CUSHION, \$7.00 per 100.

BRONZE CUSHION, \$7.00 per 100.

PINK CUSHION, \$2.00 per 100.

Pink, 2½-in. pots, \$35.00 per 1000.

NOTE: The CUSHION is the well known AMELIA. Order now.

Wonderland, Ellerson, Va.

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ROOTING CUTTINGS

NO SOLUTIONS NEEDED MEASURING SOAKING VIALS

ANYONE can apply it!

Just dip the base of the cutting in ROOTONE and immediately set in the propagating bed. Lowest chemical cost per cutting and practically no labor cost. Eliminates risk of over dosage.



CANADIAN HEMLOCK

Left: Untreated.

Right: Treated with ROOTONE powder.

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Kills seed-borne fungi; increases root system and top growth of plants. Gives stronger plants.

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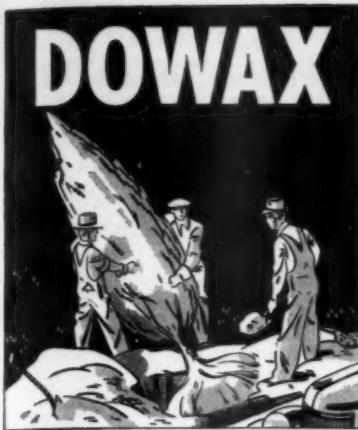
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Replacing trees and shrubs that fail to survive transplanting eats heavily into every nurseryman's profits.

By protecting trees and shrubs with DOWAX* before transplanting, you can greatly increase chances of survival. DOWAX, an entirely new, scientific wax emulsion, greatly reduces mortality in transplants by conserving moisture and preventing drying out. In cases such as evergreens, where pruning to offset reduced root systems is impossible, DOWAX is especially valuable because it guards

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Apply DOWAX during the dormant or leaf stage. It does not penetrate or injure plant tissue—cannot melt or run.

Any type spray equipment will apply the semi-permeable, moisture-conserving film of DOWAX that permits transpiration and respiration at reduced rates.

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Dusters 8 Sizes, 80 Models — Threshers 4 Sizes — Corn Shellers 3 Sizes

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ESTABLISHED 1857

Floral Co. the central feature was a large urn of Picardy gladioli, with a tall vase of white snapdragons on each side. There were also urns of bedding stock, and a row of geranium, marigold, ageratum and foliage plants along the front of the space.

E. Asjes, of the Rosehill Flower Gardens, exhibited hardy hydrangeas, roses and lantanas. Evergreens were exhibited by the Williams & Harvey Nurseries Co.

VERHALEN'S ROSES DISPLAYED.

The newer varieties of roses which are being grown by the Verhaelen Nursery Co. were displayed at the Shreveport flower and garden show by the Lambert Landscape Co., Shreveport, La., May 21 and 22, and created a sensation.

Growing conditions at Scottsville, Tex., this spring are favorable and the rose fields there have been a veritable flower show in themselves the past three weeks, says George F. Verhaelen. The varieties Dream Parade, Luis Brinas, Sterling, Sallie, Mme. Cochet-Cochet, Gloriana, Ireland Hampton, Nellie E. Hillock and Dainty Bess are exceptionally good.

Fitzter's juniper and Berckman's Golden arbor-vite, among evergreens, and Amoor River North and other hardy privets, among shrubs, promise good crops for autumn.

Preliminary sampling of the large acreage of Narcissus Paper White indicates the majority of commercial "rounds" are running fourteen centimeters and up. Growth has been continuous since planting time last September, no hard freezes occurring during the winter to check them.

BULLETINS RECEIVED.

The title, " Implements and Methods of Tillage to Control Soil Blowing on the Northern Great Plains," fully de-

scribes farmers' bulletin 1797, just issued by the United States Department of Agriculture and written by John S. Cole, senior agronomist, and George W. Morgan, former associate agronomist, division of dry land agriculture of the bureau of plant industry.

"Construction of Private Driveways," miscellaneous publication 272 of the United States Department of Agriculture, gives much practical information on the methods of construction, grading, widths, etc., of private driveways. Any landscape man called upon to do construction work of this type, if he does not have ample data on how to do it, will find this 30-page bulletin of real value.

TWIN CITY NURSERY TRADE.

The Twin City region has had all the rain wanted and perhaps more than is desirable. The weather has held up nursery work in many cases; orders received early in the season have been attended to with difficulty. One of the factors which have caused some concern is the feeling of many homeowners that it is too late to do much planting because of the leafing out of trees and shrubs.

In the cash-and-carry selling of shrubs, department stores have had an advantage over what usually is called legitimate trade. That these stores have been selling large quantities of stock is proved by the many inquiries received at University Farm, St. Paul, relative to the care of such shrubs. To tramp over a nursery ground soaked and muddy because of rain is one thing; to see shrubs and tubbed evergreens in the comfort of a store is something else again.

Forrest Sargent, of the Red Wing Nursery, Red Wing, has been doing a considerable business, although from a report last week a slackening of orders has been observed.

Kilmer's Northern Nursery, St. Paul, is sporting a new Diamond T truck.

Business has been good, although again the weather is responsible for delayed orders. Earl Kilmer explained the difficulty in this way, "Many potential customers don't appear to know that we have material in the cellar which can be planted without injury for several weeks to come."

Sheffield's Nursery Service, Minneapolis, has had a fairly good run of business. It does not appear as if the total volume will be much, if any, above that of last year. In the flower department, a good business is being done in filling urns, etc., for cemeteries. Sales have been good for several weeks.

NEW PLANT PATENTS.

It is announced by Rummel, Rummel and Woodworth, patent lawyers of Chicago, that the following new plant patents were issued May 17, 1938:

278. Apple tree. Thomas Elwood Graham, Kent county, Mich., assignor to Greening Nursery Co., Monroe, Mich. A new and distinct variety of apple tree, characterized particularly by its earlier bearing age; by the solid bright red color of its fruit, and by the larger size, earlier ripening and more agreeable flavor of the fruit as compared with Northern Spy.

279. Rose. J. H. Nicolas, deceased, late of Newark, N. J., assignor to Jackson and Perkins Co., Newark, N. J. A new variety of large flowering, hardy polyantha rose, particularly adapted for mass planting, characterized by its intertwining characteristics, its disease resistance and winter hardiness and the snow-white coloring and long lasting qualities of its flowers.

THE seventh annual bulb show of the California Nursery Co., Niles, Cal., recently attracted visitors from all parts of the state.

A NEW nursery at Lynden, Wash., has been opened by James Vander Giessen, East Grove street, to be known as the Vander Giessen Nursery.

WORK was recently completed on what is believed to be the largest private garden at Santa Rosa, Cal., by the Molino Nursery, Sebastopol. J. C. and W. C. Bennett operate the nursery.

PLANT-OF-THE-MONTH CLUB.

A city-wide beautification campaign to last a full year was launched in connection with the recent cleanup week at Beaumont, Tex. Under the auspices of the city chamber of commerce, the movement will be directed by Veezey Rainwater, Jr., manager of the local Coca Cola plant, whose father is a business partner of the owner of the famous Bellingrath gardens, near Mobile, Ala., and who is an enthusiastic leader in civic improvement. Florists and nurserymen are coöperating.

The chief feature of the plan is a Plant-of-the-month Club, composed of citizens who volunteer to buy a plant each month for the beautification of their grounds. Plants suitable for the season will be selected by a committee composed of Ralph Griffing, Peter Johnson, P. A. Winkler, Frank Bertschler, Mrs. Mike Peveto and Mrs. Mildred Murchison. Notices of the choice will be mailed to the public with monthly water bills.

Those who are active in the club for the entire year will be eligible to take part in a garden contest to be held in May, 1939, and gardens which show the most improvement will be put on the itinerary of a garden tour sponsored by the city. For the contest classifications have been made of public buildings, stores, factories, filling stations and home grounds of various sizes and types.

Nurserymen of Beaumont believe that the campaign will result in a widespread increase in the use of trees and shrubs, whether or not it is continued in future years, as it will be if sufficient public interest is aroused. Should the idea spread to other localities, the benefit will be even larger.

KANSAS LANDSCAPE MEETING.

The Association of Kansas Landscape Architects met Sunday, May 22, at Manhattan, Kan. Twenty-five members attended the meeting, as well as two guests, L. R. Quinlan and A. R. Pickett, of the department of horticulture of Kansas State Agricultural College.

After a luncheon at the Pines café, the group adjourned for the meeting to Dickens hall on the campus.

The featured talk was by C. L. Webb, chief warden of the Kansas forestry, fish and game commission, who spoke on the activities and program of the commission with particular reference to state parks.

After the program those in attendance made an informal inspection of the

perennial gardens adjoining the horticulture buildings.

Prof. W. D. Durrell, instructor at the University of Kansas and a graduate of the Massachusetts Agricultural College, was admitted to membership, and Ralph Smith, Topeka, Kan., was elected to affiliate membership.

Officers were reelected as follows: President, Ralph Ricklefs, Salina; vice-president, Harold Crawford, Ottawa; secretary-treasurer, Lawrence Kelley, Salina.

The summer meeting will probably be held at Topeka, the place and date to be announced later.

SOUTHWESTERN NOTES.

The W. R. Grimshaw Co., Tulsa, Okla., has been awarded the construction con-

tract for the Will Rogers memorial, which includes landscaping.

Robert M. Manning, Pampa, Tex., since the first of the year has been operating a nursery known as the Panhandle Nursery.

Its eleventh anniversary is being celebrated this month by the Pendleton Nursery, Mount Lebanon, Pa. Theodore Matragas has been the manager for the past seven years.

PART of the nursery material used in landscaping the New York world's fair grounds is being provided by the Oak Park Nurseries, East Patchogue, N. Y. The firm recently shipped seventy-five large evergreens to be used near the theme center.

ANNUAL CONVENTION**American Association of Nurserymen**

Detroit — July 19 to 21

Current issues tell of the notable entertainment and convention program that will attract nurserymen from all over the country next month. Good spring business has provided ample carfare. Attendance will be the biggest in years.

PRE-CONVENTION NUMBERS

June 15 :: July 1 :: July 15

Containing details of the convention program and entertainment, advance information on scheduled events, trips and important speakers will have readers' full interest.

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OBITUARY.

Ben H. Weller.

Ben H. Weller, founder of the Weller Nurseries Co., Holland, Mich., died May 8 at the Holland hospital after a short illness. He was 75 years of age.

Mr. Weller was born in Boskoop, Holland, where he grew up in the nursery business. He operated a nursery there until 1902, when he came to America. In 1903 he settled in Holland, Mich., and soon started a small retail nursery which was the beginning of what is the Weller Nurseries Co. today. Later he was joined by his sons and nephews, and in 1921 the business was incorporated under the present name. He was the first president; later he became vice-president, until 1935, when he had to retire.

He is survived by a widow, three sons, five daughters, one brother and one sister, all residing in and around Holland, Mich.

M. WADLEY, Bronxville, N. Y., has bought twenty acres of land on Dobbs Ferry road, in the Greenburgh section of Westchester county. The property will be developed as a nursery.

Its twenty-fifth year in business is being celebrated this year by the Norton Bros. Nursery, Riverside, Cal. C. T. Norton is head of the firm, which has an establishment covering twenty acres.

AT a receiver's auction recently, the Shrewsbury Nurseries, Eatontown, N. J., were purchased by Edward G. Walder, Eatontown, for \$16,300 plus back taxes of \$1,600. Sixty-eight acres are included in the property.

T. KIVONO, Crichton, Ala., is leaving soon for a four months' trip to Europe. He expects to return about September 15. Mr. Kivono reports a splendid spring business which topped the records of the last three years.

C. WARNER PRICE, vice-president of Towson Nurseries, Inc., Towson, Md., is back at his office again. Mr. Price experienced a serious illness after an operation for appendicitis was performed at University hospital.

FRANK M. RICHARD, JR., Fort Collins, Colo., reports that spring there was ideal for planting, long and cool with plenty of rain and the best outlook for water for irrigation this summer in ten years. Business is considerably ahead of last year.

THE Sanders Nursery Co., 623 Clara avenue, St. Louis, Mo., is celebrating its seventy-fifth anniversary. It was founded by the late Carew Sanders in 1863. With him was associated the late Norman J. Coleman. In later years, the company was headed by Mr. Sanders' oldest son, C. C. Sanders, who, with his four sons, operated the business. At the death of C. C. Sanders, a few years ago, three of the brothers withdrew from the firm, and it is now operated by the oldest son, Walter C. Sanders, who has associated with him his son, John H. Sanders, and Arthur R. Mann. The latter two are in charge of the retail shop, while Mr. Sanders himself handles the nursery end of the business.

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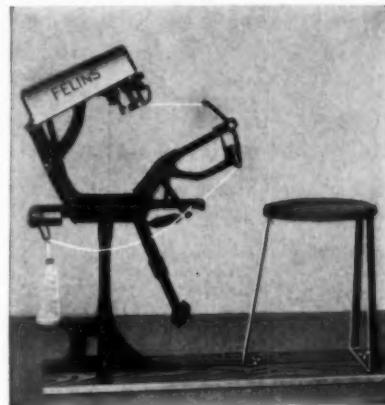
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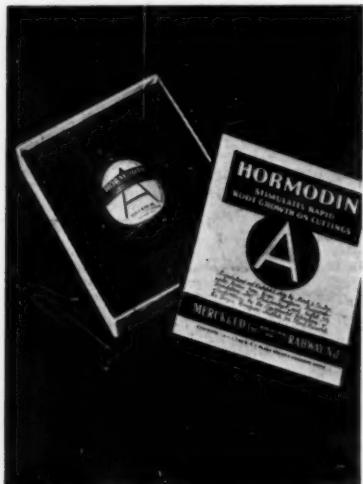
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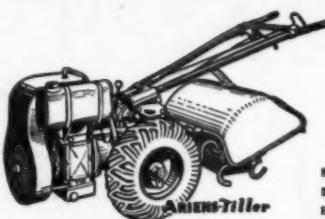
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